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COUNTY BOROUGH OF SALFORD.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1915.

BY

C. H. TATTERSALL,

MEDICAL OFFICER OF HEALTH.

JOHN HEYWOOD LTD,
Printers and Publishers, Manchester and London.

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MEMBERS OF THE HEALTH COMMITTEE.

1915-1916.

Alderman Huddart, J.P., *Chairman.*

Alderman Desquesnes, *Deputy-Chairman.*

Alderman Hulton, J.P. (*Mayor*).
,, Worsley, J.P. (*Deputy Mayor*).
,, Linsley, J.P.
,, Kinghorn, J.P.
Councillor Barrett, J.P.
,, Bescoby.
,, Bratherton.

Councillor Cran.
,, Hailwood, J.P.
,, J. Jones.
,, Pinder, J.P.
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TO THE HEALTH COMMITTEE.

GENTLEMEN,—

I have the honour to present my Annual Report on the health of the Borough and the work of the Public Health Department for the year 1915.

There has been further reduction in the Birth Rate during the year (from 26·9 per 1,000 to 24·8 per 1,000), and the Death Rate has slightly increased, being 19·1 per 1,000 as compared with 17·1 for 1914.

There has been a slight increase in the infantile deaths, which have been at the rate of 134 per 1,000 births.

The estimate of the population of the Borough on which these figures are based has been made by the Registrar-General on the results of the National Registration Act, allowing for the removal of that portion of the population which has undertaken military duties, so they are not really comparable with the rates given for the previous years.

There has been a marked reduction in the Notifiable Infectious Diseases in the Borough. There was one case of Small Pox, from which, fortunately, there was no spread of the disease.

The most marked advance during the year has been the creation of a definite department for Maternity and Child Welfare Work. Dr. Clara Lomas-Harris was appointed to take charge of this work, and under her supervision the seven Health Visitors and the Inspector of Midwives carry on the work. A Clinic in connection with this Department has been established at Regent Road, and much valuable work has been done there, and every assistance is given to the Mothers' Guilds that are working in the Borough.

The work of the Department has been much hampered by the absence, on military service, of still more of the Staff. At the end of 1915 Drs. Fitzgerald, Uttley, Duncan, and De Jong, Mr. Whitehead, the Veterinary Inspector, two Sanitary Inspectors, three Nurses, three Ambulance men, five members of the Disinfecting Staff, and twelve clerks had already taken up military duties. With the exception of five of the clerks it has not been found possible to replace the absentees, and considerable difficulty in carrying on the work of the Department has been experienced.

I have the honour to be, Gentlemen,
Your obedient Servant,
C. H. TATTERSALL,
Medical Officer of Health.

Public Health Department,
Town Hall, Salford,
9th June, 1916.

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SECTION I.

MORTALITY STATISTICS.

SECTION I.

MORTALITY STATISTICS.

Population.

The Registrar-General estimates that the civil population of the County Borough of Salford was 219,979 in the middle of 1915, and this number is made the basis on which the various Birth, Death, and Sickness rates mentioned in this report are calculated.*

The male population is estimated to be 106,181, and the female 113,798.

The age distribution of the population is—

Under 5 years of age	25,577
From 5 to 15	44,821
,, 15 ,, 25	40,986
,, 25 ,, 65	100,759
Over 65	7,836

The natural increase of the population for the year, that is, the excess of births over deaths, is 1,264.

---

* This estimate is based on the returns under the National Registration Act, making the necessary allowance for enlistments, &c.

Births.

There were 5,455 births registered in the Borough in 1915, 2,813 being males and 2,642 females, giving a birth rate of 24·8 per thousand of the population. This is a decrease from the previous year of 863 births, or a decrease in the birth rate of 2·1 per thousand. The birth rate for the 96 large towns averaged 22·8, and for the whole of England and Wales, 21·8, as compared with 24·8 in Salford. There were 198 births registered as illegitimate, or 3·6 per cent of the total births; 61 of these illegitimate births were registered in the first quarter, 57 in the second, 46 in the third, and 34 in the fourth.

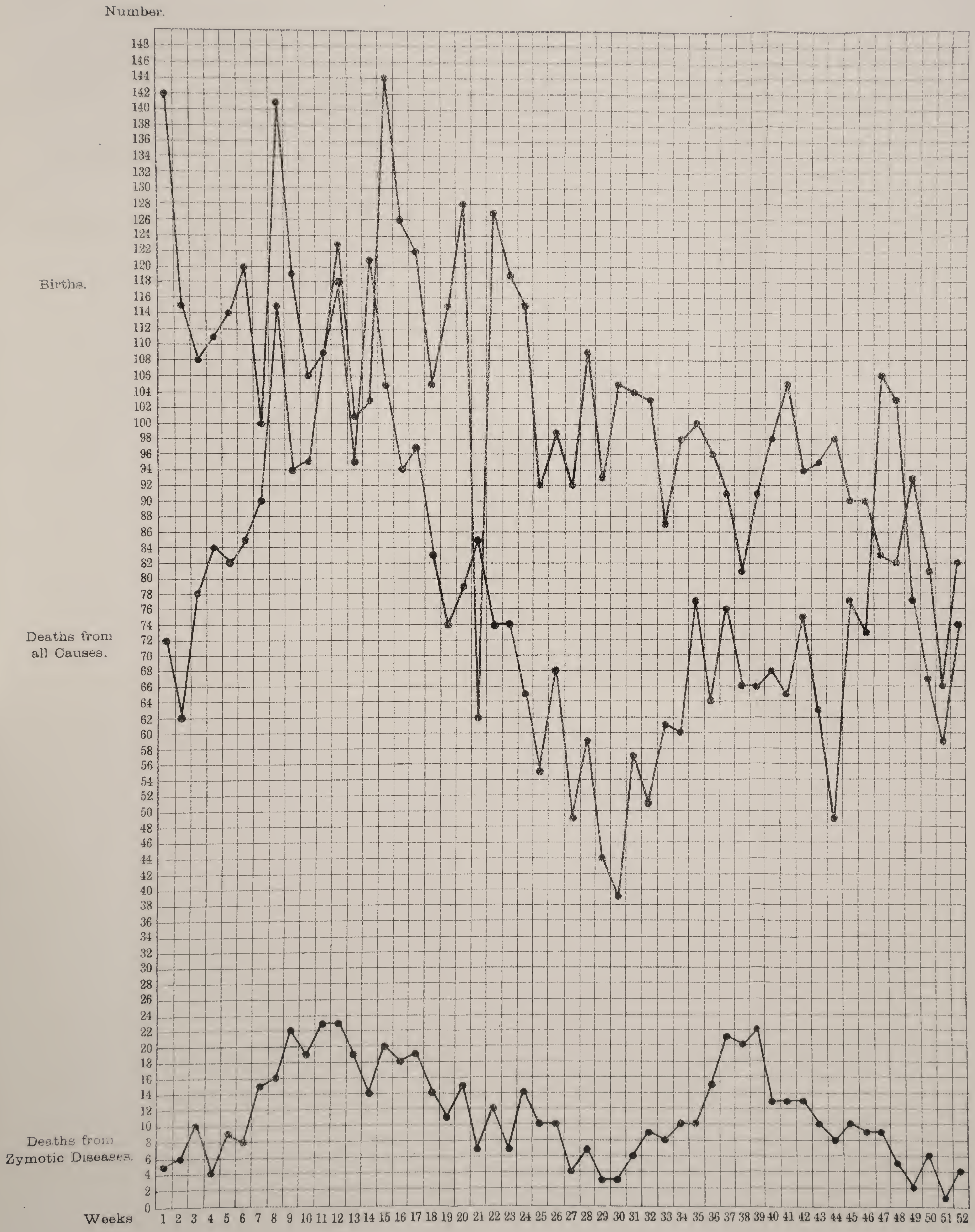
Still Births.—I have ascertained from the Registrars of the Cemeteries, and the Sextons of other burial grounds, that the bodies of 213 still-born children have been buried. The Midwives notified the occurrence of 122 still births.

Deaths.

The total number of deaths registered in the Borough during 1915 was 4,191, of which number 2,148 were males and 2,043 females, giving a death rate of 19·1 per thousand of the population. There were 1,242 deaths in the first quarter of the year, 1,115 in the second, 827 in the third, and 1,007 in the fourth. The accompanying chart shows the number of births and deaths registered weekly from all causes, and from zymotic diseases, respectively.

Acute Lung Diseases.—From bronchitis, pneumonia, and pleurisy, 966 deaths were registered, against

BIRTHS, DEATHS FROM ALL CAUSES, AND FROM ZYMOTIC DISEASES, IN EACH WEEK DURING 1915.



879 for 1914, 849 for 1913, and 948 for 1912. From bronchitis there were 525 deaths, giving a death rate of 2·3 per thousand persons living, while from pneumonia there were 429 deaths, giving a death rate of 1·9. From respiratory diseases generally there were 94 more deaths than in 1914.

CANCER.—There were 247 deaths registered as being due to cancer or malignant disease, giving a death rate of 1·1 per thousand, as compared with 1·1 last year.

NERVOUS DISEASES.—From the various nervous diseases there were 304 deaths, giving a death rate of 1·4 per 1,000, as compared with 1·4 in 1914, 1·4 in 1913, 1·4 in 1912, and 1·4 the average for the five years 1910 to 1914.

HEART DISEASE.—There were 356 deaths from heart disease. This gives a death rate of 1·6 per 1,000, compared with 1·8 for 1914, 1·8 for 1913, 1·5 for 1912, and 1·6 the average for the five years 1910 to 1914.

COMPARISON WITH DECENNIAL AVERAGES.—In Table M 11 there will be found an interesting comparison of the deaths from various specified causes in 1915, with the decennial average number for the Borough, and in three diseases only was there an excess; but the greatest diminution was in brain and nervous diseases, diphtheria and membranous croup, and atrophy and marasmus.

PHTHISIS, TUBERCULAR DISEASES, AND INFLUENZA.—The mortality from these diseases will be found in Section II. of this report.

Deaths at Various Ages.—These are shown in detail in Table No. M 4. Comparing the death rates with the previous year, it is found that under five years of age the rate is 52·6 per thousand, against 49·6; from 5 to 15 years of age the rate is 3·9, against 3·5; from 15 to 25, 4·2, against 4·3; from 25 to 65, 15·4, against 13·9; and over 65, 119·7, against 91·9 per thousand.

Out of the total number of deaths 3,839 or 91·6 per cent were certified by Registered Medical Practitioners, 348 or 8·3 per cent by the Coroner, and 4 or 0·1 per cent were uncertified.

Infant Mortality.—There were 733 deaths of infants under one year of age registered during the year, giving a death rate of 134 per thousand births. This is an increase on the previous year, when the death rate was 126 per thousand births. The average of the preceding five years was 136 per thousand births. The chief causes of death among infants, compared with the average of the preceding five years, were—

Zymotic diseases	246	compared with	268
Atrophy, marasmus, debility..	87	,, ,,	96
Premature birth	107	,, ,,	119
Convulsions................	28	,, ,,	34
Bronchitis and pneumonia ...	166	,, ,,	174

The 246 deaths from zymotic diseases were principally due to diarrhœa, 152; measles, 68; and whooping cough 21.

The work of the Health Visitors for the purpose of checking infant mortality is dealt with in Section V. of this report.

Senile Mortality.—938 or 22 per cent of the total deaths were those of persons of 65 years of age or over; this is 2 per cent more than last year. Of these 214 were certified to have died from old age, 119 from heart disease, 228 from bronchitis, 96 from brain disease, and 77 from cancer.

Zymotic Diseases.—The death rate from the seven zymotic diseases for the year was 2·8 per thousand of the population, as compared with 1·9 in the previous year, 1·9 in 1913, and 2·2 in 1912. The deaths from the various diseases are given in the following table :—

		1915	1914		1915	1914
Measles		263	113	Whooping Cough	49	77
Scarlet Fever		31	78	Diphtheria	29	33
Fever	Typhus	—	—	Diarrhœa	223	196
	Enteric	19	18	Small Pox	—	—
	Continued	—	—			

Detailed information as to zymotic sickness will be found in Section II. of this report.

Deaths among Members of Naval and Military Forces.

The deaths of 22 Salford residents were reported during the year. Eight of these occurred in the Borough and 14 outside the Borough.

Eighteen deaths have occurred in the Borough of residents outside the district.

STATISTICAL SUMMARY, 1915.

Population (**civil**)—Estimated to the middle of the year	**Males**	106,181	**Total**	219,979
	Females...	113,798		
Births	**Males**	2,813	**Total**	5,455
	Females...	2,642		
Annual Rate of Births per 1,000 of the Population				24·8
Deaths under One Year of Age per 1,000 Births				134
Deaths	**Males**	2,148	**Total**	4,191
	Females...	2,043		
Annual Rate of Mortality per 1,000	**Males**	20·2	**Total**	19·1
	Females...	18·0		
Annual Rate of Mortality per 1,000 from the seven principal Zymotic Diseases.				1·9
Excess of Registered Births over Deaths				1,264
Estimated Annual Decrease of Population				14,996

Density.—The mean density of the Borough is equal to 42·2 persons per acre.

Area.—The Municipal Borough of Salford has a total area of 5,202 acres.

Elevation.—The mean elevation of the Borough is 140 feet above sea-level, and varies between 85 feet and 250 feet.

TABLE M. 1.

For Whole District.

YEAR.	Population, estimated to Middle of each Year.	Births.			Total Deaths Registered in the District.		Transferable Deaths		Nett Deaths belonging to the District.			
		Un-corrected Number.	Nett.						Under 1 Year of Age.		At all Ages.	
			Number.	*Rate.	Number.	*Rate.	of Non-Residents registered in the District.	of Residents not registered in the District.	Number.	Rate per 1,000 Nett Births.	Number	*Rate.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10	11.	12.	13.
1910..........	230,579	6,526	6,594	28·6	3,769	16·3	132	101	866	131	3,738	16·2
1911..........	231,641	6,281	6,345	27·4	3,890	16·8	77	223	980	154	4,036	17·4
1912..........	232,726	6,134	6,227	26·8	3,853	16·6	60	212	811	130	4,005	17·2
1913..........	233,849	6,336	6,430	27·0	3,819	16·0	117	181	891	139	3,883	16·3
1914..........	234,975	6,236	6,318	26·9	3,941	16·8	129	199	793	126	4,011	17·1
1915..........	**219,979**	**5,373**	**5,455**	**24·8**	**4,071**	**18·5**	**155**	**275**	**733**	**134**	**4,191**	**19·1**

* Rates in Columns 5, 7, and 13 calculated per 1,000 of estimated population.

NOTE.—The deaths to be included in Column 6 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 6, corrected by the subtraction of the number in Column 8 and the addition of the number in Column 9.

By the term "Non-Residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there: and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

Area of district in acres (exclusive of area covered by water) .. 5,202	Total Population at All Ages	231,380	At Census of 1911.
	Total Families or Separate Occupiers..	47,935	

TABLE M. 2.

Ward.	Population estimated to the middle of the Year.	Birth-rate per 1,000.	Death-rate per 1,000.	Deaths under 1 year per 1,000 Births.
Kersal	17,229	18·1	11·5	74
Albert Park	14,809	22·6	14·6	104
Grosvenor	13,667	25·7	17·6	122
St. Matthias'	11,949	32·9	23·8	130
Trinity	9,589	25·0	29·8	217
Crescent	11,758	26·9	24·2	132
Islington	9,390	31·6	32·0	202
Regent	11,870	18·3	20·1	152
Ordsall	14,262	27·4	20·7	169
Trafford	10,856	31·0	21·4	119
Charlestown	15,433	29·5	19·4	134
St. Thomas'	10,653	26·0	25·8	177
St. Paul's	11,869	28·0	20·3	165
Seedley	22,036	22·5	15·0	97
Weaste	13,330	20·0	15·2	97
Hope	21,279	17·6	12·5	107
Totals	**219,979**	**24·8**	**19·1**	**134**

TABLE M. 3.

DEATHS IN WARDS FOR THE YEAR 1915.

CAUSES OF DEATH.	At all Ages.																
	Borough.	Kersal.	Albert Park.	Grosvenor.	St. Matthias'.	Trinity.	Crescent.	Islington.	Regent.	Ordsall.	Trafford.	Charlestown.	St. Thomas'.	St. Paul's.	Seedley.	Weaste.	Hope.
Enteric Fever	19	1	..	2	1	1	1	2	1	1	3	1	..	1	1	1	2
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	263	3	11	11	20	16	18	28	16	21	28	24	21	17	21	5	3
Scarlet fever	31	..	4	1	1	2	2	2	1	2	..	3	1	1	4	2	5
Whooping cough	49	..	..	..	5	1	1	5	5	5	2	7	7	2	3	1	5
Diphtheria and Croup	31	1	3	4	1	5	3	..	1	3	3	2	..	..	2	1	2
Influenza	39	2	2	5	2	1	3	..	2	2	2	5	1	1	1	3	7
Erysipelas	6	..	..	1	..	..	1	..	1	..	..	..	2	..	1	..	..
Anthrax	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Phthisis (Pulmonary Tuberc.)	375	16	14	26	25	35	39	20	17	23	27	24	21	21	28	16	23
Tuberc: Meningitis	41	1	4	2	6	3	2	4	1	5	4	2	2	1	3	..	1
Other tuberculous diseases	67	4	1	4	8	4	7	5	4	3	3	7	5	4	4	2	2
Cancer (Malignant Disease)	247	22	18	20	10	14	14	13	13	12	7	13	14	19	28	16	14
Rheumatic Fever	27	1	1	4	2	..	2	4	2	3	1	..	2	..	1	1	3
Meningitis	29	..	..	2	1	..	3	1	2	1	1	6	..	4	4	1	3
Cerebro-Spinal Meningitis	7	..	..	..	..	..	..	..	1	1	2	1	..	..	1	1	1
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

Poliomyelitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Organic Heart Disease	356	19	22	22	18	24	31	21	17	20	22	21	25	21	20	27	26
Bronchitis	525	34	29	31	47	32	26	49	37	40	30	27	23	26	29	23	32
Pneumonia (all forms)	429	12	22	17	32	36	32	30	24	32	22	35	37	21	41	12	24
Other Diseases of Respiratory Organs	36	1	4	2	1	3	..	1	3	..	3	5	4	2	2	3	2
Diarrhœa and Enteritis	223	5	11	7	13	17	20	25	11	31	21	12	15	15	8	7	5
Appendicitis and Typhilitis	11	4	1	1	..	1	..	1	..	..	..	..	1	..	..	1	1
Cirrhosis of Liver	21	..	..	..	3	..	4	1	2	2	1	3	..	1	2	1	1
Alcoholism	9	..	..	1	..	1	1	..	1	3	1	1	..	..	..	..	..
Nephritis and Bright's Disease	89	2	8	3	5	3	9	4	5	8	2	4	8	4	7	6	11
Puerperal fever	6	..	..	..	..	..	..	1	..	..	..	..	..	..	2	2	1
Other Accidents and Diseases of Pregnancy and Parturition	16	2	..	1	..	..	..	1	1	..	2	2	2	2	1	1	1
Congenital Debility and Malformation, including Premature Birth	227	6	12	17	15	**21**	13	16	9	15	8	16	9	24	20	11	15
Violent Deaths (excluding Suicide)	127	7	6	6	10	9	10	7	10	4	8	11	5	10	12	8	4
Suicide	14	..	..	2	1	..	..	..	..	2	..	1	2	1	3	1	1
Other Defined Diseases	818	55	42	46	52	50	40	55	48	53	30	64	58	42	68	49	66
Ill-defined or Unknown	53	1	2	3	5	7	3	5	4	3	..	2	8	1	3	2	4
Totals	**4191**	**199**	**217**	**241**	**284**	**286**	**285**	**301**	**239**	**295**	**233**	**299**	**273**	**241**	**330**	**203**	**265**

TABLE M. 4.

CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1915.

CAUSES OF DEATH.	NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.									Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District.
	All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
ALL CAUSES—										
Certified	4,187	732	362	252	175	174	535	1,022	935	969
Uncertified	4	1	..	..	..	..	..	..	3	..
Enteric Fever	19	..	1	..	4	5	7	2	..	19
Small Pox	..	..	..	..	..	..	..	..	..	..
Measles	263	68	119	67	8	1	..	..	..	3
Scarlet Fever	31	..	3	17	8	1	2	..	..	33
Whooping Cough	49	21	17	10	1	..	..	..	..	2
Diphtheria and Croup	31	2	6	13	8	..	1	..	1	26
Influenza	39	1	..	..	1	5	3	12	17	3
Erysipelas	6	3	..	..	..	..	1	2	..	1
Anthrax	..	..	..	..	..	..	..	..	..	..
Phthisis (Pulmonary Tuberculosis)	375	2	8	10	12	73	172	91	7	87
Tuberculous Meningitis	41	10	11	11	7	2	..	..	..	2
Other Tuberculous Diseases	67	17	12	7	7	8	6	7	3	24
Cancer, malignant disease	247	..	..	..	1	2	32	135	77	71
Rheumatic Fever	27	..	..	..	4	3	7	8	5	5
Meningitis	29	9	7	6	6	..	..	1	..	1
Cerebro-Spinal Meningitis	7	..	..	2	3	..	2	..	..	7
Poliomyelitis	..	..	..	..	..	..	..	..	..	..
Organic Heart Disease	356	..	..	1	11	16	64	145	119	71
Bronchitis	525	44	11	8	8	2	33	191	228	113
Pneumonia (all forms)	429	91	87	55	27	9	45	81	34	66
Other diseases of Respiratory organs	36	2	2	3	..	..	12	12	5	10
Diarrhœa and Enteritis	223	152	59	8	1	..	..	..	3	12
Appendicitis and Typhlitis	11	..	..	1	2	4	1	2	1	9
Cirrhosis of Liver	21	..	..	..	..	..	5	14	2	9
Alcoholism	9	..	..	..	..	..	2	7	..	2
Nephritis & Bright's Disease	89	1	..	2	4	1	19	48	14	17
Puerperal Fever	6	..	..	..	..	3	3	..	..	6
Other accidents and diseases of Pregnancy & Parturition	16	..	..	..	..	2	14	..	..	3
Congenital Debility and Malformation, including Premature Birth	227	218	3	3	2	1	..	..	..	8
Violent Deaths, excluding Suicide	127	7	3	15	20	19	16	30	17	92
Suicide	14	..	..	..	..	..	8	4	2	4
Other Defined Diseases	818	73	11	9	24	17	76	218	390	260
Diseases ill-defined or unknown	53	12	2	4	6	..	4	12	13	3
Totals	4,191	733	362	252	175	174	535	1,022	938	969

TABLE M. 5.

INFANT MORTALITY DURING THE YEAR 1915.

NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3 Months and under 6 months.	6 Months and under 9 Months.	9 Months and under 12 m'ths.	Total Deaths under one Year.
ALL CAUSES—										
Certified	128	35	40	21	224	113	112	135	148	732
Uncertified	..	..	..	..	..	..	..	1	..	1
Small-pox	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	1	3	27	37	68
Scarlet Fever	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	..	..	..	3	5	3	10	21
Diphtheria and Croup	..	..	..	..	..	1	..	..	1	2
Erysipelas	..	..	1	..	1	..	..	..	2	3
Tuberculous Meningitis	..	..	..	..	..	1	4	3	2	10
Abdominal Tuberculosis	..	..	..	..	..	5	3	1	5	14
Other Tuberculous Diseases	..	..	..	..	..	..	..	2	3	5
Meningitis (*not Tuberc.*)	1	..	..	..	1	..	2	3	3	9
Convulsions	3	1	2	1	7	4	6	6	5	28
Laryngitis	..	..	..	..	..	..	..	..	..	..
Bronchitis	..	1	1	..	2	9	12	13	8	44
Pneumonia (all forms)	1	..	1	..	2	5	9	35	40	91
Diarrhœa	..	..	5	..	5	12	28	17	13	75
Enteritis	..	2	2	4	8	19	21	16	13	77
Gastritis	..	1	1	..	2	1	1	..	..	4
Syphilis	1	..	..	..	1	8	1	..	..	10
Rickets	..	..	..	..	..	1	..	1	..	2
Suffocation, overlying	1	..	1	..	2	6	1	1	..	10
Injury at Birth	5	..	..	..	5	..	..	..	..	5
Atelectasis	9	1	..	..	10	..	..	..	..	10
Congenital Malformations	6	3	4	1	14	6	2	..	2	24
Premature Birth	69	9	14	6	98	9	..	..	..	107
Atrophy, Debility, and Marasmus	27	13	6	8	54	15	11	4	3	87
Other causes	5	4	2	1	12	8	3	4	1	28
Totals	128	35	40	21	224	113	112	136	148	733

Nett Births in the Year	Legitimate	5,257	Nett Deaths in the Year of	Legitimate Infants	692
	Illegitimate	198		Illegitimate Infants	41

TABLE M. 7.

Births in the County Borough of Salford and in its Wards, distinguishing Deaths of Legitimate and Illegitimate Infants under One Year old.

For the Year 1915.

Ward.	Births.		Percentage of Illegit. Births to total Births.	Deaths under One Year.		Proportion of Deaths under One Year per 1,000 Births.		
	Total.	Illegit.		Total.	Illegit.	Total.	Legit.	Illegit.
Kersal	312	11	3·5	23	5	74	60	455
Albert Park	335	11	3·3	35	1	104	105	91
Grosvenor	352	16	4·5	43	2	122	122	125
St. Matthias'	393	14	3·6	51	2	130	129	143
Trinity	240	13	5·4	52	5	217	207	385
Crescent	317	13	4·1	42	2	132	132	154
Islington	297	10	3·3	60	3	202	198	333
Regent	277	5	1·8	42	2	152	147	400
Ordsall	391	8	2·0	66	5	169	159	625
Trafford	337	9	2·7	40	2	119	116	222
Charlestown	455	8	1·8	61	2	134	132	250
St. Thomas'	277	11	3·9	49	1	177	180	91
St. Paul's	333	15	4·5	55	2	165	167	133
Seedley	497	8	1·6	48	2	97	94	250
Weaste	267	35*	13·1	26	3	97	99	86
Hope	375	11	2·9	40	2	107	104	182
Totals	**5,455**	**198**	**3·6**	**733**	**41**	**134**	**132**	**207**
Corresponding Data for the Borough for the Ten Years 1905-1914.								
Borough	**66,548**	**2,112**	**3·2**	**10,059**	**574**	**151**	**147**	**272**

* Includes illegitimate births in the Union Workhouse.

TABLE M. 10.

AUSES OF DEATH REGISTERED IN EACH OF THE TEN YEARS 1905-1914, IN 1915, AND THE AVERAGE DECENNIAL NUMBER.

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	Aver-age.	1915
ll Causes	3980	4322	4207	4356	4369	3738	4036	4005	3883	4011	**4091**	4191
nall-pox	..	..	..	..	..	..	..	..	..	..	..	..
easles	73	185	103	168	192	83	98	246	129	113	**139**	263
arlet Fever	66	44	62	65	82	28	20	11	30	78	**49**	31
hooping Cough	46	52	143	103	47	100	37	127	40	77	**77**	49
iphtheria & Memb. Croup	81	90	74	125	107	53	54	31	29	38	**68**	29
roup	4	4	2	1	12	2	1	1	..	..	**3**	2
yphus Fever	..	..	..	..	..	..	..	..	..	..	..	..
nteric Fever	44	41	20	42	39	23	20	19	26	18	**29**	19
ther Continued Fever	..	1	..	..	1	..	..	..	..	..	..	..
pidemic Influenza	27	33	57	70	67	18	28	30	28	41	**40**	39
mple Cholera	..	..	..	..	..	..	..	..	..	..	..	..
iarrhœa, Dysentery	275	341	101	231	116	128	359	83	187	196	**202**	223
nteritis	60	79	46	64	51	56	41	28	27	7	**46**	
uerperal Fever	15	6	10	8	7	8	5	4	5	5	**7**	6
rysipelas	13	6	6	5	9	4	11	5	6	8	**7**	6
ther Septic Diseases	5	11	9	11	9	8	13	12	12	12	**10**	11
hthisis	331	393	386	383	355	315	380	341	324	385	**359**	375
ther Tubercular Diseases	206	141	149	161	157	182	196	148	136	118	**159**	108
ancer	143	177	168	169	189	202	213	227	237	251	**198**	247
ronchitis	403	458	481	436	530	416	428	489	440	438	**452**	525
neumonia	413	413	516	397	533	395	407	454	401	429	**436**	429
leurisy	9	9	17	16	8	6	7	5	8	12	**10**	12
ther D : Respiratory Org.	19	26	36	29	24	30	29	24	36	17	**27**	24
lcoholism and Cirrhosis of Liver	45	43	59	53	43	28	27	21	33	41	**39**	30
enereal Diseases	28	23	19	26	31	20	20	14	20	13	**21**	5
remature Birth	149	142	136	128	150	113	125	122	124	111	**130**	107
rain & Nervous Diseases	373	376	377	383	382	365	307	335	327	331	**356**	304
rinary Diseases	92	98	109	102	107	95	119	103	114	111	**105**	89
trophy and Marasmus	132	145	147	189	117	111	89	78	121	72	**120**	87
is: & Accid: of Parturition	19	20	12	11	10	21	21	13	25	16	**18**	16
eart Diseases	360	336	369	326	317	332	299	360	424	443	**357**	356
ccidents	115	117	125	134	129	110	125	142	139	141	**128**	127
icide	25	13	14	26	24	16	23	22	14	13	**19**	14
ll other causes	409	499	454	494	524	470	534	510	441	476	**481**	638

TABLE M. 11.

Mortality from Special Diseases.—Diminution and Excess.—The following table shows the greater or less fatality of disease in 1915, as compared with their simple decennial average numbers in the Borough:—

Cause of Death:	Diminution in 1915.	Excess in 1915
Small-pox	..	..
Measles	..	124
Scarlet Fever	18	..
Fevers	10	..
Whooping Cough	28	..
Diphtheria and Membranous Croup	39	..
Diarrhœal Diseases	25	..
Tuberculosis	35	..
Premature Births	23	..
Brain and Nervous Diseases	52	..
Heart Diseases	1	..
Respiratory Diseases	..	65
Urinary Diseases	16	..
Atrophy and Marasmus	33	..
All other causes	..	199
	280	388
Balance of Excess		108

TABLE M. 14.

owing the Birth-Rates, also Rates of Mortality from all causes, from the Seven Principal Zymotic Diseases, and from Phthisis, Cancer, Nervous Diseases, Heart Diseases, Bronchitis, Pneumonia, and the Marriage Rate, during the Years 1878 to 1915.

s.	Population.	Rates per 1,000 Population from									Deaths under One Year to 1,000 Births.	Marriage Rate.
		Births.	Deaths, All Causes.	Seven Principal Zymotic Diseases.	Phthisis.	Cancer.	Nervous Diseases.	Heart Diseases.	Bronchitis.	Pneumonia.		
..	160,277	44·7	27·1	5·4	2·7	0·5	3·5	1·1	3·6	1·8	185	17·9
*	165,899	43·0	26·7	4·2	2·9	0·4	3·7	1·2	4·3	1·8	170	15·2
..	171,727	41·4	27·9	7·4	2·7	0·4	3·2	0·9	3·4	1·9	197	16·6
..	177,760	38·8	22·5	3·0	2·5	0·5	3·1	1·1	3·6	1·6	163	16·4
..	179,855	39·7	23·7	4·0	2·4	0·4	3·6	1·1	2·8	1·7	177	16·9
age 5 years.		**41·5**	**25·6**	**4·8**	**2·6**	**0·4**	**3·4**	**1·1**	**3·5**	**1·8**	**178**	**16·6**
..	181,951	37·3	23·6	3·4	2·7	0·4	3·1	1·2	3·0	1·7	171	16·1
*	184,047	38·8	24·4	4·4	2·6	0·5	2·9	1·1	2·8	1·7	184	16·1
..	186,142	37·6	23·0	3·6	2·6	0·5	2·9	1·2	3·0	1·9	174	16·1
..	188,238	38·5	24·8	4·1	2·6	0·5	2·8	1·3	3·3	1·8	197	15·3
..	190,334	36·6	25·5	4·9	2·3	0·5	3·2	1·3	2·9	2·2	195	15·4
age 5 years.		**37·8**	**24·3**	**4·1**	**2·6**	**0·5**	**3·0**	**1·2**	**3·0**	**1·9**	**184**	**15·8**
..	192,429	37·1	24·8	3·9	2·3	0·5	3·0	1·1	3·0	2·1	184	15·2
..	194,525	35·9	25·1	5·3	1·9	0·6	2·5	1·3	2·6	1·9	181	16·7
*	196,621	36·1	27·7	4·4	2·2	0·5	2·0	1·3	3·4	3·8	198	17·5
..	198,775	36·3	26·0	3·4	2·2	0·5	2·2	1·1	3·7	3·0	194	18·1
..	200,833	35·8	24·6	4·6	1·9	0·6	2·0	1·2	2·6	2·9	186	16·7
age 5 years.		**36·2**	**25·6**	**4·3**	**2·1**	**0·5**	**2·3**	**1·2**	**3·1**	**2·7**	**189**	**16·8**
..	203,015	34·7	24·1	4·2	1·9	0·6	2·0	1·4	2·6	2·3	211	16·2
..	205,220	34·3	21·1	3·3	1·8	0·6	2·0	1·1	1·9	2·3	174	17·1
..	207,449	35·9	25·6	5·0	1·9	0·6	2·0	1·3	2·6	2·7	229	17·4
*	209,703	35·6	23·1	4·2	1·5	0·6	2·3	1·4	2·2	2·7	200	18·1
..	211,981	35·2	23·9	5·6	1·8	0·6	2·1	1·3	2·4	2·1	219	18·6
rage 5 years.		**35·1**	**23·6**	**4·5**	**1·8**	**0·6**	**2·1**	**1·3**	**2·3**	**2·4**	**207**	**17·5**
..	214,284	34·9	22·8	4·2	1·8	0·8	2·2	1·2	2·2	2·2	213	18·6
..	216,612	34·1	23·9	4·4	1·8	0·6	2·3	1·4	2·5	2·7	211	18·7
..	218,965	33·3	25·3	4·1	1·8	0·6	2·4	1·7	3·2	2·8	208	17·3
..	221,212	29·2	21·7	4·2	1·8	0·7	1·9	1·5	2·3	1·9	205	17·9
*	222,233	34·0	19·3	2·7	1·7	0·7	2·0	1·5	2·2	2·1	157	18·4
rage 5 years.		**33·1**	**22·6**	**3·9**	**1·8**	**0·7**	**2·2**	**1·5**	**2·5**	**2·3**	**199**	**18·2**
..	223,260	32·6	19·4	2·9	1·8	0·7	1·9	1·4	2·1	1·9	168	18·1
..	224,299	32·4	21·4	4·4	2·0	0·6	1·8	1·7	2·2	1·9	193	21·5
..	225,327	31·8	17·7	2·6	1·5	0·6	1·7	1·6	1·8	1·8	148	17·8
..	226,367	31·2	19·1	3·3	1·7	0·8	1·7	1·5	2·0	1·8	162	18·6
..	227,413	30·6	18·5	2·2	1·7	0·7	1·7	1·6	2·1	2·3	140	17·9
rage 5 years.		**31·7**	**19·2**	**3·1**	**1 7**	**0·7**	**1·8**	**1·6**	**2·0**	**1·9**	**162**	**18·8**
*	228,463	31·2	18·7	3·2	1·6	0·7	1·6	1·4	1·9	1·7	153	15·5
..	229,519	29·5	19·0	2·5	1·5	0·8	1·7	1·4	2·3	2·3	141	15·6
..	230,579	28·6	16·2	1·8	1·4	0·9	1·6	1·4	1·8	1·7	131	16·0
..	231,641	27·4	17·4	2·5	1·6	0·9	1·3	1·3	1·8	1·8	154	..
..	232,726	26·8	17.2	2·2	1·5	1.0	1·4	1·5	2·1	2·0	130	..
rage 5 years.		**28·7**	**17·7**	**2·4**	**1·5**	**0·9**	**1·5**	**1·4**	**2·0**	**1·9**	**142**	..
*	233,849	27·0	16·3	1·9	1·4	1·0	1·4	1·8	1·8	1·7	139	..
	234,975	26·9	17·1	1·9	1·6	1·1	1·4	1·8	1·8	1·8	126	..
	219,979	24·8	19·1	2·8	1·7	1·1	1·4	1·6	2·3	1·9	134	..

he years 1879, 1884, 1890, 1896, 1902, 1908, and 1913, the facts are those registered in 53 instead of 52 weeks; corrections have therefore been made in calculating the rates.

TABLE M. 15.

Deaths Registered in the County Borough of Salford during the Year 1915.

Age.	Males.	Females.
Under 1 year	413	320
1 to 2 years	182	180
2 to 3 ,, ...	65	61
3 to 4 ,, ...	42	29
4 to 5 ,, ...	31	24
5 to 10 ,, ...	55	59
10 to 15 ,, ...	28	33
15 to 20 ,, ...	39	42
20 to 25 ,, ...	44	49
25 to 35 ,, ...	114	94
35 to 45 ,, ...	179	148
45 to 55 ,, ...	243	195
55 to 65 ,, ...	306	278
65 to 75 ,, ...	275	307
75 to 85 ,, ...	115	197
85 to 95 ,, ...	17	29
Over 95	..	..
	2,148	**2,043**

SECTION II.

INFECTIOUS DISEASES.

SECTION II.

INFECTIOUS DISEASES.

The total number of cases of infectious disease notified to the Health Department, under the Infectious Diseases (Notification) Act, was 1,626, which is 1,483 less than in the previous year, and 226 less than the average for the preceding five years. This decrease is due to the fall in the number of notifications from scarlet fever, which was 1,339 less than last year. There were 997 cases of scarlet fever, 236 of diphtheria, and 84 of enteric fever. Full details, for comparison of these figures with preceding years, will be found in Table No. I 2. The death rate from the seven zymotics for the year was 2·8 per thousand, compared with 1·9 in 1914, 1·9 in 1913, 2·2 in 1912, and 2·5 in 1911. These figures include the deaths from diarrhœa, measles, and whooping cough, in addition to the notifiable diseases.

Particulars as to sickness from the non-notifiable infectious diseases cannot be given, but the particulars of mortality are as follows :—

Other Tubercular Diseases	108	deaths.
Measles	263	,,
Whooping Cough	49	,,
Diarrhœa	223	,,
Influenza	39	,,

This shows a large increase in the deaths from measles and diarrhœa when compared with the figures for 1914, and also a decrease in whooping cough and other tubercular diseases.

The highest number of cases notified in any one week was 56, which occurred in the 2nd week of the year (January), and the lowest number was 18 in the 45th week (November) and in the 51st week (December). In 1914 the highest number was 90 in the 2nd week, and the lowest 27 in the 51st week.

Small Pox.

One case of Small Pox occurred in the Borough during the year at 41, Falcon Street, Weaste, the patient being a man, G. B., aged 38 years, who was employed as a greaser on the s.s. *Werdenfels*, a prize vessel from Alexandria. A case of Small Pox occurred on board this vessel on the 8th May. I was informed by the Medical Officer of Health for the Port of London on the 13th May that this man and another member of the crew were proceeding to this district. The homes were visited forthwith, and the men kept under strict observation.

The Sanitary Inspector reported to me on the 17th May that G. B. had a rise of temperature. I visited the patient the same day and also twice on the following day, when I decided that the case was one of Small Pox.

The occurrence of the case necessitated the removal of all the tuberculous patients from the Drinkwater Park Hospital, and this was satisfactorily completed before 9 o'clock on the morning of the 19th May, and the patient was admitted shortly after 10 a.m. The other members of the patient's family, nine in number, were also removed to the Hospital for quarantine.

The Staff of my Department, the patient's family, and about 40 other contacts were re-vaccinated.

The patient was discharged from the Hospital cured on the 7th June.

Scarlet Fever.

There were 997 cases of scarlet fever notified during 1915. This number is 1339 less than that for the preceding year, and 187 below the average for the preceding five years. The attack rate is therefore 45·3 per 10,000 of the population, as compared with 99·4 for the preceding year.

Ages.	Cases.	Deaths.	
		Total.	Percentage.
Under 1 year ..	4	..	..
1 to 5 years ..	276	20	7·2
5 to 15 ,, ..	598	8	1·4
15 to 25 ,, ..	89	1	1·1
25 to 65 ,, ..	30	2	6·7
Over 65 ,, ..	..	..	..
TOTAL	997	31	3·1

There were 31 deaths, giving a mortality rate of 3·1 per cent of the cases or 1·4 per 10,000 of the population. The cases were spread over the whole year, being most numerous in the month of January, when there were 133 notifications, and fewest in November, when there were 50 notifications. In respect of age, scarlet fever showed itself to be mainly a disease of youth, 60 per cent of the cases occurring between the ages of five and fifteen, 12 per cent were over fifteen years of age, and 28 per cent were children under five years of age. The mortality, as might be expected, is much the heaviest among the latter, being 7·2 per cent of the cases, whereas between the ages of five and fifteen and over fifteen the mortality was 1·5 per cent. 825 cases, or 82·7 per cent of the total, were removed to Ladywell Sanatorium.

Diphtheria.

There were 236 cases of diphtheria notified during 1915, compared with 352 in 1914, and 328 the average for the preceding five years. The attack rate is therefore 10·7 per 10,000 of the population, as compared with 15·0 for the preceding year. There were 29 deaths registered from diphtheria, giving a death rate of 12·3 per cent of those attacked, compared with a death rate of 10·8 per cent in 1914, an average for the preceding five years of 14·6 per cent, and also a death rate of 1·3 per 10,000 of the population.

Ages.	Cases.	Deaths.	
		Total.	Percentage.
Under 1 year ..	3	1	33·0
1 to 5 years ..	109	18	16·0
5 to 15 ,, ..	91	8	8·8
15 to 25 ,, ..	17	..	..
25 to 65 ,, ..	15	1	6·7
Over 65 ,, ..	1	1	100·0
TOTAL	236	29	12·3

The cases were spread over the whole year, the numbers ranging from 29 in March to 14 in May. With regard to age, 203 cases, or 86 per cent, were children under 15 years of age, and 112 cases, or 47 per cent, were children under five years of age, the mortality amongst the latter class being very heavy, the deaths reaching the large proportion of 17 per cent of the cases. During the year 94 specimens were forwarded to Professor Delepine for bacteriological examination.

	Cases.	Mortality.	Percentage.
Notification of Diphtheria	236	29	12·3
Specimens submitted by Medical Practitioners to Bacteriological examination with Positive results	12	..	
Specimens submitted by Medical Practitioners to Bacteriological examination with Negative results.	82	..	..

Comparing Salford with England and Wales, the 96 Great Towns, and London, the mortality rates per 10,000 living were as follows :—

England and Wales	1·5
96 Great Towns	1·6
London	1·6
Salford	1·3

Enteric or Typhoid Fever.

There were 84 cases of enteric fever notified during 1915, which is an increase of 21 when compared with 1914, and an increase of 11 on the average of the preceding five years. This gives an attack rate for the Borough of 3·8 per 10,000 persons living, as compared with 2·7 for the preceding year. There were 19 deaths, giving a mortality rate of 23 per cent of the cases, or 0·9 per 10,000 of the population.

The cases were most numerous in the month of September, when there were 16 notifications. Only one case was reported during the month of July. With regard to age, the cases were most numerous in the age period 25 to 65 years, the number (40) being 48 per cent of the total cases.

Ages.	Cases.	Deaths.	
		Total.	Percentage.
Under 1 year ..	..	..	..
1 to 5 years ..	2	1	50·0
5 to 15 ,, ..	24	4	16·7
15 to 25 ,, ..	17	5	29·4
25 to 65 ,, ..	40	9	22·5
Over 65 ,, ..	1	..	..
TOTAL	84	19	22·6

There were 69 cases removed to the Sanatorium, or 82 per cent of the total cases, as compared with 78 per cent in 1914, 79 per cent in 1913, 64 per cent in 1912, and 74 per cent in 1911.

Puerperal Fever.

There were 23 cases of this disease notified during the year. There were 5,455 births during the year, so that the attack rate was 0·4 per cent. Of these cases six died, giving a mortality rate of 26·1 per cent of the cases.

Erysipelas.

There were 172 cases of erysipelas during the year 1915, as against 248 in 1914, 203 in 1913, 181 in 1912, 217 in 1911, 129 in 1910, 182 in 1909, and 127 in 1908.

Measles.

There were 263 deaths from measles during the year, giving a death rate of 12 per 10,000 living, the rates for the preceding five years being 1910, 3; 1911, 4; 1912, 11; 1913, 6; and 1914, 5.

Whooping Cough.

There were 49 deaths from whooping cough during the year, all except one of which occurred among children under five years of age. The death rate for the Borough was 2 per 10,000 persons living, as compared with 3 for 1914, and 3 the average for the past five years. The death rate for England and Wales was 2 per 10,000, and the average for the 96 great towns was 2.

Diarrhœa.

The death rate from diarrhœa was 10·1 per 10,000 living, as compared with 8 last year, 8 in 1913, 4 in 1912, 15 in 1911, and 5 in 1910.

Epidemic Influenza.

Thirty-nine deaths were returned as directly due to this cause.

Cerebro-Spinal Meningitis.

Nine notifications of this disease were received during the year, 7 proving fatal.

Acute Poliomyelitis.

Seven cases of this disease were reported during the year.

Anthrax and Glanders.

No cases of Anthrax or Glanders were notified during the year.

Ophthalmia Neonatorum.

Ninety-seven cases of Ophthalmia Neonatorum were reported during 1915, as compared with 80 notified from the 1st April, 1914, to the end of that year.

Tuberculosis.

Tuberculosis Dispensary.

The Staff now consists of a Consulting Medical Officer, two Assistant Medical Officers, four Lady Health Visitors and three Clerks.

An analysis of the work done during the past year follows :—

	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
New Cases Examined—									
(*a*) Diagnosed as Tuberculous	..	..	..	..	..	..	..	..	466
(*b*) Diagnosed as Non-tuberculous	..	..	..	..	..	..	..	..	292
(*c*) Taken under Observation	..	..	..	..	..	..	..	..	989
Cases Re-examined—									
(*a*) Diagnosed as Tuberculous (Old Cases)	..	..	..	..	..	..	..	..	644
(*b*) Diagnosed as Tuberculous (formerly under Observation)	..	..	..	..	..	..	..	..	72
(*c*) Diagnosed as Non-tuberculous	..	..	..	..	..	..	..	..	203
(*d*) For further Observation	..	..	..	..	..	..	..	..	980
Cases Sent by Medical Practitioners	69	68	137	15	17	32	84	85	169
Cases Discharged—									
(*a*) From Treatment	1	1	2	3	5	8	4	6	10
(*b*) From Observation	9	13	22	34	45	79	43	58	101
Cases Died	3	..	3	3	2	5	6	2	8
Contacts Examined—									
Positive	..	..	..	..	2	2	..	2	2
Negative	..	..	..	48	229	277	48	229	277
Taken under Observation	..	..	..	7	25	32	7	25	32
Contacts Examined (School Children)—									
Positive	..	..	..	3	4	7	3	4	7
Negative	..	..	..	213	237	450	213	237	450
Taken under Observation	..	..	..	34	31	65	34	31	65
No. of Attendances	3723	2517	6240	3692	6188	9880	7415	8705	16120
Tuberculin administered	1013	494	1507	195	424	619	1208	918	2126
Reports to Insurance Committee—									
New Cases	175	132	307	..	..	..	175	132	307
Reconsidered Cases	218	183	401	..	..	..	218	183	401
Cases Returned from Sanatorium and taken under Observation	18	24	42	3	3	6	21	27	48
Cases Returned from Drinkwater Park and taken under Observation	86	56	142	23	43	66	109	99	208
Cases under treatment on 31st December, 1915	..	..	442	..	..	882	..	..	1324
Cases under observation on 31st December, 1915	..	..	889	..	..	1305	..	..	2194

	Negative.	Positive.	Total.
Samples of Sputum Examined—			
Dispensary Cases	279	53	332
General Practitioner's Cases	48	16	64

Nurses' Visits to Homes of Patients: 7,918.

During the year 1915 the Medical Officers notified 157 cases, of which four were contacts (2·5 per cent). The number of contacts, including both adults and school children, examined at the Dispensary during 1915, is 833, and of these nine were notified by the Medical Officers as suffering from phthisis, *i.e.*, 1·1 per cent. Out of 1,407 patients attending for examination voluntarily 100 were notified, *i.e.*, 7·1 per cent. It would thus appear that the most valuable method for the discovery of persons suffering from pulmonary tuberculosis lies in publicly advertising the fact that patients suffering from chest complaints, loss of flesh, &c., will be examined at the Dispensary. The examination of contacts, however, is also of value, since it makes possible the discovery of chronic, latent or incipient cases.

The X-Ray apparatus has been of great value as an aid to diagnosis, especially in the hilus tuberculosis of children.

An encouraging feature of the past year has been the number of cases sent for diagnosis by the practitioners of the Borough, which represent 169 out of the total of 1,747 examined.

Tuberculin has been administered 2,126 times, and it is proposed in future to give this method of treatment a more extended trial. Hitherto the treatment has appeared to be of more benefit in cases of chronic disease, however extensive, than in cases presenting acute symptoms.

There were during the year 375 deaths from phthisis, and 108 deaths from other tubercular diseases, giving a mortality rate of 17 and 5 respectively per 10,000 of the population.

One thousand and twenty-three cases were notified during the year as compared with 1,468 during last year. Of the 1,023 notifications, 816 were new cases and 207 were re-notifications of cases already on the books.

Of the new cases, 387 were notified by General Practitioners, 355 by Medical Officers of Hospitals and Dispensaries, 68 by Poor Law Medical Officers, and six by School Medical Officers.

The mean age at death of patients dying during the year from pulmonary phthisis was:—Males, 37 years; females, 30 years. From tuberculosis, other than pulmonary phthisis:—Males, 9 years; females, 8 years.

From Table A the age and sex distribution of cases and deaths among those notified is readily seen.

Table B gives the occupation of the cases notified so far as could be ascertained.

TABLE A.

AGE AND SEX DISTRIBUTION OF CASES OF PHTHISIS NOTIFIED DURING THE YEAR 1915.

	Males.		Females.		Totals.	
	No.	Deaths	No.	Deaths	No.	Deaths
Under 10 years ..	99	4	93	12	192	16
10 to 20 ,, ..	77	8	94	12	171	20
20 to 30 ,, ..	69	12	89	11	158	23
30 to 40 ,, ..	59	13	68	21	127	34
40 to 50 ,, ..	57	19	42	9	99	28
50 to 60 ,, ..	32	12	17	4	49	16
Over 60 ,, ..	15	6	5	4	20	10
TOTALS	408	74	408	73	816	147

TABLE B.

OCCUPATIONS OF THE 816 CASES NOTIFIED.

MALES.

OUTDOOR WORKERS.

1. Building Trades	3
2. Carters, Coachmen, Hawkers, & Car Drivers	19
3. Labourers and Navvies	48
4. Travellers	4
5. Stonemasons	3
6. Railway Workers	4
7. Seamen	7
8. Other Outdoor Workers	20
Total	108

INDOOR WORKERS.

1. Employees in Cotton Mills	2
2. Colliers	1
3. Hairdressers	3
4. Clerks and Warehousemen	27
5. Butchers	5
6. Joiners and Woodworkers	6
7. Painters	2
8. Metal Workers	18
9. Tailors	6
10. Core Makers	3
11. Bleachers and Dyers	4
12. Packers	4
13. Rubber Workers	3
14. Printers	5
15. Mechanics and Engineers	7
16. Boot Repairers	3
17. Shopkeepers & Assistants	8
18. Bakers	1
19. Children under 5	23
20. Scholars	121
21. No Occupation stated	5
22. Other Occupations	43
Total	300

FEMALES.

1. Machinists		19
2. Mill Hands	Workers in Textile Factories	37
3. Weavers		8
4. Housewives		114
5. Charwomen		7
6. Makers of Wearing Apparel		17
7. Clerks		4
8. Printers		3
9. Waitresses		5
10. Servants		12
11. Packers		4
12. Cigarette Makers		2
13. Shop Assistants		3
14. Waste Sorters		3
15. Children under 5		30
16. Scholars		117
17. Other Occupations		18
18. No Occupation stated		5
Total		408

TABLE C.

Inspector's Report on the Duration of the Disease in Cases Visited at the Time of Notification.

When Notified.	
Under six months	325
Over 6 months to 1 year	92
,, 1 year to 18 months	67
,, 18 months to 2 years	12
,, 2 years to 3 years	30
,, 3 years	38
No Time Stated	220
	784

The following particulars were obtained from the various medical practitioners, who had notified cases, 32 in number, that were not to be visited by the officials of this Department during the past 12 months:—

No longer under the Doctor's care	14
Improving	8
Dead	6
	28

The following are the particulars of the cases sent to Delamere, with a statement as to their present condition :—

Year.	Cases sent.	Died within					Total deaths.	Removed or lost sight of.	Now unsatisfactory.	Now in good condition.
		1 year	2 years	3 years	4 years	5 years				
1908..	16	3	1	1	..	..	5	3	..	8
1909..	13	2	..	..	..	..	2	6	1	4
1910..	14	2	1	1	1	1	6	2	..	6
1911..	20	4	..	1	1	..	6	4	1	9
1912..	26	4	1	1	..	..	6	8	2	10
1913..	63	7	4	..	..	..	11	15	13	24
1914..	57	5	..	..	..	..	5	5	13	34
1915..	49	3	..	..	..	..	3	3	9	18
Totals	258	30	7	4	2	1	44	46	39	113

Sixteen patients are still in Delamere.

From the above Table it is seen that out of 89 cases sent to Delamere in the years 1908, 1909, 1910, 1911, and 1912, 25 have died, 23 have been lost sight of, but were in good health when we last heard of them, and 37 now remain in a healthy condition.

This must be considered fairly satisfactory, as from three to seven years after treatment had been concluded, forty-two per cent of the cases (excluding removals) appear to be "cured," being in good health and following their ordinary employment.

During the year 1915, 218 notifications of non-pulmonary tuberculosis have been received. Twenty-three of these are re-notifications of cases already on the books, and one hundred and ninety-five are new cases.

The new cases notified are classified in the following table :—

	Glands.	Bones.	Abdomen.	Skin.	Other forms.	Totals.
Under 10 years	15	11	36	8	28	98
10 to 20 years	17	13	14	8	3	55
20 ,, 30 ,, ...	9	7	..	4	2	22
30 ,, 40 ,, ...	3	5	2	2	..	12
Over 40 ,, ...	1	2	3	2	..	8
Totals	45	38	55	24	33	195

CASES TREATED AT THE CROSSLEY SANATORIUM, DELAMERE, YEAR ENDING 31ST DECEMBER, 1915.

DURATION OF TREATMENT.	INSURED PERSONS.			NON-INSURED PERSONS.		
	Male.	Female	Total.	Male.	Female.	Total.
Under 2 months......	2	5	7	..	..	..
2—3 months	4	3	7	..	2	2
3—4 ,, ...	6	3	9	1	..	1
4—5 ,, ...	6	6	12	1	2	3
5—6 ,, ...	1	3	4	1	2	3
Over 6 ,, ...	..	1	1	..	..	..
In at end of the year .	5	8	13	..	3	3
TOTALS	24	29	53	3	9	12

Report of the Drinkwater Park Sanatorium for the Year ending 31st December, 1915.

By H. OSBORNE, M.D., Medical Superintendent.

The Sanatorium was first opened for patients suffering from Tuberculosis on February 13th, 1913, with accommodation for 18 males and 15 females. This has since been increased by the addition of 17 beds.

The staff consists of a Resident Medical Officer, Matron, four Nurses, Cook, two Kitchen-maids, two House-maids, 2 Ward-maids, Porter, Gardener, and Shepherd.

General Line of Treatment Adopted.

All cases before admission are examined at the Tuberculosis Dispensary, and as far as possible only those cases which appear to have a reasonable chance of recovery are admitted.

The average stay in Hospital was about seven weeks, experience having proved to us that this is sufficiently long for the purpose of education and commencement of treatment. Education, indeed, is looked upon as the most important part of the treatment.

Whilst in hospital, the patients, by means of lectures and demonstrations, are taught how to deal with their sputum, and also how to order their lives under home conditions in a manner which will involve a maximum of benefit to themselves and a minimum of danger to others.

When discharged from Hospital, patients continue treatment at the Tuberculosis Dispensary, and, as the majority of them resume work, the Dispensary is opened in the evenings for tuberculin injections.

The Hospital was open on 339 days only for the treatment of Tuberculosis. During the remaining 26 days of the year (from the 19th May to 14th June) the Hospital was required for the isolation of a mild case of Small Pox, together with a number of contacts.

The total number of Tuberculous patients admitted during the year 1915 was 267. Of these, 16 were re-admitted when the Hospital was re-opened for Tuberculosis on June 15th. Thus the total admissions for the year was 283.

The total number of discharges was 299. The total number of "Patient-Days" was 14,864, which gives an average of practically 44 patients per day during the period the hospital was open. The accompanying table sets forth the above figures in detail :—

TABLE A.

Showing the Number of Admissions, Etc., and the Number of "Patient-Days" for 1915.

	Insured Persons.			Uninsured Persons. (Over 16 years of age).			Children under 16.			Totals.		
	Males	Females	Both	Males	Females	Both	Males	Females	Both	Males	Females	Both
Number of persons admitted during the year 1915	107	73	180	5	28	33	23	31	54	135	132	267
Number of persons re-admitted during the year 1915 after closure of Hospital for smallpox. .	7	5	12	. .	. . .	. .	2	2	4	9	7	16
Total number of admissions during 1915	114	78	192	5	28	33	25	33	58	144	139	283
Total number of discharges during 1915	119	83	202	3	28	31	33	33	66	155	144	299
Number of persons admitted in 1914 who remained in Hospital for some part of 1915	22	9	31	. .	2	2	11	3	14	33	14	47
Number of "Patient-days" for persons admitted during 1915	5838	3440	9278	306	1199	1505	1357	1355	2712	7501	5994	13495
Number of "Patient-days" (in 1915) for persons admitted in 1914 who remained in Hospital for some part of 1915	637	308	945	. .	58	58	304	62	366	941	428	1369
Total number of "Patient-days" for 1915........	6475	3748	10223	306	1257	1563	1661	1417	3078	8442	6422	14864
Average number of Patients in Hospital each day during 1915 (hospital was open for 339 days). .	19·1	11·1	30·2	0·9	3·7	4·6	4·9	4·2	9·1	24·9	18·9	43·8

Note.—The term "patient-days" represents the product of the number of patients and the number of days spent by these patients in the Hospital.

Owing to the great demand for labour created by the war, it has not been so easy to fill the hospital with the most suitable cases: many persons suffering from earlier tuberculosis preferring to remain at work, or even to take up military duties.

Some of the cases admitted have, therefore, been of rather active or advanced type, and in certain of these it has been necessary to prescribe absolute rest for a period.

There was one death during the year, this patient appearing to develop a rapid tubercular pneumonia.

All patients are kept in bed under observation for some days after admission. Then if progress is satisfactory they are allowed up for an increasing number of hours each day. Afterwards, graduated exercise is prescribed, beginning (say) with quarter-mile walk per day and increasing, according to the patient's condition, to several miles per day, in addition to work in the garden. In the summer months the patients worked in the garden in the morning, and did their prescribed walk in the evening after tea. The afternoons were free, and generally devoted to games, such as bowls or golf. Several bowling tournaments were held, and proved a great attraction to all patients; those who were not fit to play having their couches moved to the edge of the lawn, where they could watch the progress of the games in comfort.

There is no question as to the great benefit derived from carefully graduated outdoor exercise. Increased appetite naturally follows, as also improved tone and resistance, and a more happy and contented frame of mind.

In addition, one may venture to hope that by awakening in the town-dweller an interest and love for nature, he may spend more of his spare time in the country and away from the dusty streets and the close rooms of his former haunts. In accordance with this idea, several lantern lectures on nature subjects, such as bird life and plant life, were delivered in the early spring.

Tuberculin Treatment.

In addition to treatment by fresh air, diet, and graduated exercise, Tuberculin was administered to patients who it was considered might derive benefit from the same, including not only the earlier cases but some of the more advanced types with a chronic tendency.

In administering tuberculin, one has tried to increase the doses in a fairly regular geometrical progression, having a ratio of 1·5. Thus beginning with a dose of ·0001 c.c. P.T.O. the progression would be as follows:—

·0001, ·00015, ·000225, ·000325, ·000475, ·0007, ·001, ·0015, ·00225, ·00325, ·00475, ·007, ·01, and so on.

This ratio of 1·5 (which means increasing the dose by 50 per cent for each successive injection) seems to answer very well with the majority of cases, but where patients are very sensitive to Tuberculin, it has been found desirable to use a smaller ratio, increasing the dose by one-third or one-fourth each time, in order to avoid troublesome reactions.

Inoculations are practically painless if the following technique be observed :—The needle used for the purpose should be short, sharp, and of fine bore ; it should be passed through the skin almost perpendicularly, the site chosen being the back just internal to the inner border of the Scapula.

In the accompanying table is shown the average weight gained by the whole of the patients, who were weighed on admission and discharge, also the average weight gained by patients under Tuberculin treatment, as well as those not under Tuberculin treatment.

TABLE B.

SHOWING THE NUMBER OF DISCHARGES DURING 1915, WITH THE TOTAL NUMBER OF DAYS SPENT BY THESE PATIENTS IN THE HOSPITAL; ALSO SHOWING THE AMOUNT OF WEIGHT GAINED IN THE ABOVE CASES, WHERE WEIGHT RECORDS ON ADMISSION AND DISCHARGE WERE AVAILABLE.

	Insured Persons.			Uninsured Persons (Over 16 years of age).			Children under 16.			Totals.		
	Males	Females	Both	Males	Females	Both	Males	Females	Both	Males	Females	Both
No. of discharges in 1915	119	83	202	3	28	31	33	33	66	155	144	299
Total number of days (1914-15) spent in Hospital by the above patients	6515	3942	10457	175	1277	1452	1703	1554	3257	8392	6773	15166
Average stay per patient in days	54·7	47·7	51·8	58·3	45·6	46·8	51·6	47·1	49·3	54·1	47·0	50·7
Number of above patients in which weight records were available	93	75	168	2	27	29	27	30	57	122	132	254
Total weight gained in lbs.	986	578¾	1564¾	18¾	207½	226¼	156¼	134¾	291	1161	921	2082
Average weight gained in lbs.	10½	7¾	9¼	9⅜	7¾	7¾	5¾	4½	5	9½	7	8¼
Number of above patients under Tuberculin treatment	58	50	108	2	16	18	3	3	6	63	69	132
Total weight gained in lbs.	621½	401¼	1022¾	18¾	153¼	172	14	16	30	654¼	571	1225¼
Average weight gained in lbs.	10¾	8	9½	9⅜	9½	9½	4¾	5½	5	10½	8¼	9¼
No. of above patients not under Tuberculin treatment	35	25	60	..	11	11	24	27	51	59	63	122
Total weight gained in lbs.	364½	177½	542	..	54¼	54¼	142¼	118¼	260½	506¾	350	856¾
Average weight gained in lbs.	10½	7	9	..	5	5	6	4½	5	8·5	5·5	7

It will be noticed from the above that whereas the average increase in weight for all patients was 8¼ lbs., the average gain for patients under Tuberculin was 9¼ lbs., and for patients not on Tuberculin 7 lbs.

However, it is to be noticed that the class of patients "not on Tuberculin" included the majority of children under 16, whose average gain would be less than an adult's. Still, comparing class with class in the above table, it will be seen that the gain in weight was somewhat greater in patients under Tuberculin treatment. But increased weight alone does not quite represent the sum total of benefit conferred by Tuberculin. When Tuberculin is administered to suitable cases it causes increased feeling of well-being, improved appetite, diminished cough and sputum, and either causes disappearance of physical signs (in early cases) or encourages fibrosis (in more advanced cases). As a rule, women seem the more sensitive to Tuberculin, and in some cases it is difficult to get past so small a dose as ·0005 c.c. P.T.O. owing to well-marked reactions following the administration of this amount.

To sum up one's impression with regard to the value of Tuberculin treatment in Phthisis, one may say that Tuberculin does not materially benefit all cases, and perhaps not even the majority. On the other hand, one has never found harm to follow the careful administration of Tuberculin, whilst in really suitable cases marked benefit has been observed to follow immediately, even where previous sanatorium treatment has brought about no improvement in the patient's condition.

The total number of Tuberculin injections given from 15th June, when the hospital was re-opened, to the end of the year, numbered 1150.

TABLE C.

Showing After Treatment in respect of the 299 cases which were Discharged from Drinkwater Park Hospital during the year 1915.

	Insured persons.			Uninsured persons over 16.			Children under 16.			Totals.		
	Males	Females	Both	Males	Females	Both	Males	Females	Both	Males	Females	Both
Dispensary	100	68	168	3	24	27	28	29	57	131	121	252
Domiciliary	10	5	15	..	2	2	2	..	2	12	7	19
Delamere Sanatorium	4	10	14	..	2	2	3	4	7	7	16	23
Other Hospitals	4	..	4	..	..	..	..	..	..	4	..	4
Died in Drinkwater Park ..	1	..	1	..	..	..	..	..	..	1	..	1
Total discharges ..	119	83	202	3	28	31	33	33	66	155	144	299

Tuberculosis in Milk.

This is dealt with in the Veterinary Surgeon's section of this report (Section IV.).

Measures taken to Prevent the Spread of Infectious Disease.

Isolation.—Out of the total 1,626 cases of infectious disease notified during the year, 1,164, or 72 per cent, were removed to the Ladywell Sanatorium and there isolated. The case of Small Pox was isolated at the Drinkwater Park Hospital.

Disinfection.—All infected bedding has been stoved in the steam disinfectors.

Bacteriology.—328 specimens in suspected cases of enteric fever, diphtheria, and phthisis have been sent to Professor Delepine, of the Owens College, for examination, and the following is the result of the work done during the year 1915:—

Enteric Fever.—53 examinations made, positive reactions obtained 16, or 30·2 per cent.

Diphtheria.—94 examinations made, and the specific bacilli were found in 12 cases, or 12·8 per cent.

Phthisis.—181 tests were made, and tubercle bacilli were found in 44 cases, or 24·3 per cent.

396 Examinations of Sputum were carried out at the Tuberculosis Dispensary.

Library books from infected homes are either disinfected or retained for the use of the patients in the hospital.

TABLE I. 1.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1915.

NOTIFIABLE DISEASES.	Cases notified in Whole District.								Total Cases notified in each Ward.																Cases removed to Hospital.
	At All Ages.	At Ages—Years.																							
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.	Kersal.	Albert Park.	Grosvenor.	St. Matthias'.	Trinity.	Crescent.	Islington.	Regent.	Ordsall.	Trafford.	Charlestown.	St. Thomas'.	St. Paul's.	Seedley.	Weaste.	Hope.	
Small-pox	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Diphtheria (including Membranous croup)	236	3	109	91	17	14	1	1	14	11	17	13	21	18	4	9	14	12	18	6	16	28	14	21	217
Erysipelas	172	3	4	8	22	56	65	14	9	6	14	15	7	19	6	8	14	6	8	10	10	18	5	17	28
Scarlet fever	997	4	276	598	89	29	1	..	94	51	55	28	28	45	30	56	64	32	89	37	51	133	52	152	825
Typhus fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric fever	84	..	2	24	17	30	10	1	4	1	1	5	5	14	6	6	5	10	3	1	6	5	3	9	69
Continued fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal fever	23	..	..	..	9	14	..	..	1	1	..	..	3	1	2	..	1	..	..	2	2	4	5	1	17
Plague	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Meningitis	9	..	3	3	1	2	..	..	..	..	..	1	..	..	..	1	..	2	1	..	..	1	1	2	8
Acute-Poliomyelitis	7	..	6	1	..	..	..	..	..	..	..	..	..	1	..	..	1	2	..	..	1	2	..	..	..
Anthrax	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Glanders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum	97	97	..	..	..	..	..	..	1	6	12	12	9	8	6	5	2	12	4	6	3	2	4	5	..
Pulmonary tuberculosis	816	1	52	247	145	273	92	6	40	39	44	49	58	62	60	41	68	51	30	43	52	72	42	65	320
Other forms of tuberculosis	195	20	39	78	31	20	7	..	18	8	13	20	12	10	10	14	14	11	10	12	8	17	7	11	13
Totals	**2637**	**128**	**491**	**1050**	**331**	**439**	**176**	**22**	**181**	**123**	**156**	**143**	**143**	**178**	**124**	**140**	**183**	**138**	**163**	**117**	**149**	**282**	**133**	**284**	**1498**

TABLE I. 2.

SHOWING THE NUMBER OF CASES OF INFECTIOUS DISEASE NOTIFIED TO THE HEALTH DEPARTMENT DURING THE YEARS 1883 TO 1915.

YEAR.	Small Pox.	Scarlet Fever.	Diphtheria.	FEVER.				Erysipelas.	Total.
				Enteric.	Typhus.	Continued.	Puerperal.		
83	6	805	81	293	14	..	21	..	1220
84	5	1154	99	422	35	..	14	..	1729
85	11	632	54	205	32	..	15	..	949
86	..	1536	41	288	5	..	12	..	1882
87	4	1427	83	368	7	..	11	..	1900
erage 5 years	**5**	**1111**	**72**	**315**	**19**	..	**15**	..	**1537**
88	52	1128	175	572	31	..	26	..	1984
89	..	1283	691	485	3	..	14	..	2476
90	..	985	704	383	6	4	22	76	2180
91	..	483	231	377	1	6	13	53	1164
92	7	865	231	347	5	5	26	86	1572
erage 5 years	**12**	**948**	**406**	**433**	**9**	**3**	**20**	**43**	**1874**
93	168	865	261	563	5	12	30	147	2051
94	35	1043	242	316	1	14	21	130	1802
95	4	1167	194	382	..	11	19	111	1888
96	2	1579	158	291	7	12	24	114	2187
97	..	714	103	291	..	14	13	121	1256
erage 5 years	**42**	**1074**	**192**	**369**	**3**	**13**	**21**	**125**	**1836**
98	..	659	97	367	16	14	31	146	1330
99	..	723	184	273	3	20	26	153	1382
00	6	1317	309	335	2	8	21	179	2177
01	..	1320	420	317	1	8	33	230	2329
02	23	780	292	207	43	6	16	164	1531
erage 5 years	**6**	**960**	**260**	**300**	**13**	**11**	**25**	**174**	**1750**
03	175	737	335	178	..	1	13	161	1600
04	57	1043	422	202	10	7	21	168	1930
05	3	960	363	142	..	7	26	176	1677
06	..	904	432	225	..	1	21	142	1725
07	8	1044	384	92	..	5	23	136	1692
erage 5 years	**49**	**938**	**387**	**168**	**2**	**4**	**21**	**157**	**1725**
08	..	1341	629	181	..	7	27	127	2312
09	..	1577	562	138	..	2	26	182	2487
10	..	909	333	113	..	..	24	129	1508
11	..	911	375	108	..	1	24	217	1636
12	..	541	242	76	..	7	26	181	1103
erage 5 years	..	**1056**	**428**	**123**	..	**3**	**25**	**167**	**1809**
13	4	1224	336	113	..	1	17	203	1907
14	1	2336	352	63	..	..	20	248	3109
15	1	997	236	84	..	..	23	172	1626

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TABLE I. 3.

SHOWING THE NUMBER OF CASES OF SICKNESS, AND THE DEATHS REGISTERED IN SALFORD, DURING THE SEVERAL MONTHS OF THE YEAR 1915.

Months.	Small Pox.		Scarlet Fever.		Diphtheria and Memb. Croup.		Typhoid Fever.		Puerperal Fever.		Typhus Fever.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
January ..	..	..	133	2	17	..	6	1	3	..	..	..
February .	..	..	118	1	25	7	6	3	1	..	..	..
March	..	..	83	3	28	4	5	2	2	..	..	..
April	..	..	60	3	20	1	13	3	1	..	..	..
May	1	..	69	2	15	2	5	3	2	..	..	..
June	..	..	86	7	17	3	..	1	2	..	..	..
July	..	..	102	6	17	1	3	..	4	..	..	..
August ...	..	..	63	1	15	3	7	..	3	3	..	..
September	..	..	74	2	20	1	12	2	2	1	..	..
October ..	..	..	90	..	18	3	14	1	1	1	..	..
November.	..	..	50	4	23	2	5	1	2	1	..	..
December	..	..	69	..	21	2	8	2	..	..	..	..
Totals ..	**1**	..	**997**	**31**	**236**	**29**	**84**	**19**	**23**	**6**	..	..

SALFORD CASES TREATED IN THE CORPORATION HOSPITALS.

	1906		1907		1908		1909		1910		1911		1912		1913		1914		1915	
	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.
Small Pox	..	..	8	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	1	..
Scarlet Fever...	695	39	818	50	1040	62	1195	70	706	20	773	17	412	9	1004	25	2068	67	840	29
Diphtheria	279	59	269	44	378	88	450	86	249	31	149	41	114	15	170	19	139	25	124	20
Typhus Fever...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhoid Fever .	147	29	61	20	119	34	97	27	95	20	86	10	59	12	68	17	33	5	50	9
Continued Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever.	13	4	13	4	15	8	14	3	9	3	10	1	17	3	10	3	13	2	18	3
Erysipelas......	40	4	30	4	24	1	31	6	26	2	37	3	27	3	20	1	35	4	22	3
*Ill-defined or all other Diseases .	82	8	81	10	176	9	30	..	24	..	250	21	147	11	153	16	181	16	141	13
Total	**1256**	**143**	**1280**	**132**	**1752**	**202**	**1817**	**192**	**1109**	**76**	**1305**	**93**	**776**	**53**	**1429**	**81**	**2409**	**119**	**1196**	**77**

* The Ill-defined cases include the Nursing Staff who may have been ill.

TABLE I. 5.

CASES FROM OUT-DISTRICTS TREATED IN THE CORPORATION HOSPITALS.

	1906		1907		1908		1909		1910		1911		1912		1913		1914		1915	
	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.	Cases Admitted.	Deaths.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever ...	163	5	180	10	196	9	298	16	269	18	224	2	146	1	122	4	360	8	242	8
Diphtheria	44	8	44	7	45	6	70	11	82	19	41	10	25	2	36	7	39	5	56	8
Typhus Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhoid Fever .	26	1	38	4	33	10	44	11	150	24	66	7	16	3	30	9	24	6	37	9
Continued Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever.	1	..	2	1	2	..	3	1	2	1	3	1	4	2	1	..	3	..	3	2
Erysipelas......	1	1	6	..	4	..	5	..	4	1	5	..	6	1	3	1	4	2	7	..
Ill-defined	10	1	11	2	5	..	11	..	8	1	34	..	22	2	5	1	19	..	28	3
Total	**245**	**16**	**281**	**24**	**285**	**25**	**431**	**39**	**515**	**64**	**373**	**20**	**219**	**11**	**197**	**22**	**449**	**21**	**373**	**30**

TABLE I. 6.

Notified Cases and Deaths from Diphtheria for Years 1883 to 1915.

Year.	Cases Notified.	Deaths.	Percentage.
1883	81	24	29·6
1884	99	22	22·2
1885	54	17	31·5
1886	41	12	29·3
1887	83	21	25·3
1888	175	61	34·9
1889	691	206	29·8
1890	704	206	29·3
1891	231	78	33·8
1892	231	55	23·8
1893	261	56	21·4
1894	242	64	26·4
1895	194	73	37·6
1896	158	52	32·9
1897	103	32	31·1
1898	97	33	34·0
1899	184	75	40·8
1900	309	90	29·1
1901	420	140	33·3
1902	292	75	25·7
1903	335	86	25·7
1904	422	116	27·5
1905	363	81	22·3
1906	432	90	20·8
1907	384	74	19·3
1908	629	125	19·9
1909	562	107	19·0
1910	333	53	15·9
1911	375	54	14·4
1912	242	31	12.8
1913	336	29	8·6
1914	352	38	10·8
1915	236	29	12·3

LADYWELL SANATORIUM.

Ladywell Sanatorium,
April 4th, 1916.

Gentlemen,

I have the honour to lay before you the record of the work done at Ladywell Sanatorium during the year ended December 31st, 1915.

The number of cases admitted to Ladywell Sanatorium in the year ended December 31st, 1915, was 1,568 (741 males and 827 females).

There were remaining in hospital on December 31st, 1914, 183 cases (93 males and 90 females, making a total number treated in 1915 of 1717 (834 males and 917 females).

Of the above there were discharged 1,543 (741 males and 802 females).

Of the total number of cases treated, 107 (46 males and 61 females) proved fatal. The percentage mortality therefore was 6·6.

As many as 17, or 15·8 per cent, of the total deaths occurred within 24 hours of admission, the length of time which the patients lived after admission varying from 15 minutes to 22 hours. The death-rate, corrected by the deduction of these deaths, was 5·6.

The percentage mortality of the principal diseases treated was as follows :—

Scarlet Fever	3·2
Enteric Fever	20·4
Diphtheria	15·5
Erysipelas	10·4
Puerperal Fever	22·7
“ Other Diseases ”	9·8

In connection with the death-rate, Table V. is of interest.

There were remaining in hospital on December 31st, 1915, 101 cases, (47 males and 54 females).

I submit the usual Tables and Charts which give full particulars of the Diseases from which the patients treated suffered, together with particulars as to age and sex distribution.

Generally speaking, the health of the staff has been excellent throughout the year. Three members of the Nursing and three of the Domestic Staff were warded

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NOTE.—Except where otherwise stated, the mortality rates are calculated according to the Registrar General's formula, *i.e.*, by dividing the deaths, multiplied by 100, by half the sum of the admissions, discharges, and deaths.

suffering from infectious disease. Two of the nurses suffered from scarlatina and one from diphtheria, whilst one of the Domestic Staff suffered from scarlatina and two from enteric fever. All made good recoveries.

On December 31st, 1915, the following members of the staff were serving with His Majesty's Forces: Dr. R. W. Duncan, Assistant Medical Officer, Sisters Heggie, Raynor, and Wilding; H. J. Wilkinson, Clerk to the Medical Superintendent; Porter Albert Chance and Driver W. Lowe. In addition, every man of military age had attested.

A considerable amount of good work has been done in the bacteriological laboratory connected with the institution. This department is in the charge of Dr. Fleming, Assistant Medical Officer, to whom I am much indebted for the great amount of careful work he has done in connection with it and the keen interest he has shown therein. As many as 1,523 examinations of pathological products have been made during the year. This number is made up as follows:—

Cultures from Throat and Nose	1032
,, ,, Ear	253
,, ,, other Pathological Discharges	199
Examination of Blood	20
,, ,, Cerebro-Spinal Fluid	19
	1523

It was found necessary to perform tracheotomy on 16 occasions. Seventy-five per cent of the cases recovered.

The Staff at Ladywell Sanatorium on December 31st, 1915, consisted of :—

Medical Superintendent	1
Assistant Medical Officer	1
Matron	1
Assistant Matron	1
Night Superintendent	1
Sister	1
Staff Nurses	5
Probationers, 1st, 2nd, and 3rd years	35
Storekeeper (female)	1
Domestics	32
Clerk to Medical Superintendent	1
Engineer	1
Firemen	3
Lodge Porters	2
General Porters	3
Gardener	1
Gardener's Labourers	4
Driver	1
	95

I desire to acknowledge the loyal assistance given me by the Assistant Medical Officer (Dr. Fleming) in all matters connected with the treatment of patients, and with administration, and by the Matron (Mrs. Rowan) through her increasing efforts in assisting to maintain the discipline of the institution and to preserve the reputation of your Nursing Staff for kind and careful nursing.

To you Gentlemen I once more desire to express my sincere thanks for the kindness and support you have ever so readily accorded to me in all matters connected with the superintendence of the Hospital Department.

I have the honour to be,
Gentlemen,
Your obedient Servant,
JOHN W. MULLEN,
Medical Superintendent.

TABLE I.

Statement of the Number of Patients under Treatment in Ladywell Sanatorium in 1915.

	Males.		Females.		Total.
	Under 5 years.	Over 5 years.	Under 5 years.	Over 5 years.	
I.—Patients remaining in Hospital on December 31st, 1914—					
Scarlet Fever	24	54	19	65	162
Enteric Fever	..	5	..	2	7
Diphtheria	2	4	1	3	10
Erysipelas	..	2	..	..	2
Other Diseases	1	1	..	..	2
Total	27	66	20	70	183
II.—Admitted during the year ended Dec. 31st, 1915, affected with—					
Scarlet Fever	140	367	121	454	1082
Measles	6	2	3	4	15
Enteric Fever	2	47	..	38	87
Diphtheria	40	52	34	54	180
Erysipelas	..	18	..	11	29
Puerperal Fever	..	..	..	21	21
Other Diseases	20	47	22	65	154
Total	208	533	180	647	1568
Total under treatment in 1915	235	599	200	717	1751

TABLE I.—*continued.*

	Males.		Females.		Total.
	Under 5 years.	Over 5 years.	Under 5 years.	Over 5 years.	
I.—Of the above there were discharged—					
Scarlet Fever	140	392	124	483	1139
Measles	5	2	3	4	14
Enteric Fever	2	41	. .	28	71
Diphtheria	31	49	24	38	142
Erysipelas	. .	19	. .	7	26
Puerperal Fever	. .	. .	. .	15	15
Other Diseases	16	44	16	60	136
Total	194	547	167	635	1543
V.—Died from—					
Scarlet Fever	13	6	9	9	37
Measles	1	. .	. . .	. .	1
Enteric Fever	. .	8	. .	10	18
Diphtheria	7	3	9	9	28
Erysipelas	. .	1	. .	2	3
Puerperal Fever	. .	. .	. .	5	5
Other Diseases	4	3	4	4	15
Total	25	21	22	39	107
.—Remaining in Hospital on Dec. 31st, 1915, affected with—					
Scarlet Fever	11	23	7	27	68
Enteric Fever	. .	3	. .	2	5
Diphtheria	4	4	2	10	20
Erysipelas	. .	. .	. .	2	2
Puerperal Fever	. .	. .	. .	1	1
Other Diseases	1	1	2	1	5
Total	16	31	11	43	101
Total under treatment in 1915	325	599	200	717	1751

TABLE II.

MONTHLY STATEMENT OF PATIENTS FOR THE YEAR ENDING DECEMBER 31ST, 1915; ALSO A COMPARISON WITH THE YEAR 1914, AND WITH THE MEAN OF THE FIVE (5) AND THIRTY-THREE (33) YEARS ENDED DECEMBER 31ST, 1914.

MONTH.	Admissions, 1915.	Admissions, 1914.	Means of Admissions, 5 years, 1910–14.	Means of Admissions, 32 years, 1883–1914.	Daily Average Number of Patients in Hospital, 1915.	Daily Average Number of Patients in Hospital, 1914.	Means of Daily Average No. of Patients in Hospital, 5 years, 1910-14.	Means of Daily Average No. of Patients in Hospital, 32 years, 1883-1914
January	209	290	138·0	104·9	213·4	241·0	152·3	138·6
February	149	208	115·0	83·9	196·4	242·0	130·4	131·2
March	150	250	129·4	89·5	187·1	231·7	128·4	155·7
April	116	236	126·0	90·9	130·9	214·5	123·6	112·5
May	105	251	133·6	94·7	123·8	233·1	132·1	112·0
June	127	218	119·2	94·9	123·0	220·6	125·5	102·9
July	130	242	110·0	103·8	133·0	238·2	126·4	117·0
August	115	228	129·8	118·7	125·7	224·5	124·9	122·6
September	123	227	151·2	135·9	119·6	230·2	136·6	139·8
October	136	274	181·2	145·8	123·4	236·9	155·3	156·3
November	107	255	193·6	132·3	114·2	268·8	192·6	172·1
December	101	179	162·8	119·5	100·6	223·6	183·7	160·5
TOTALS ...	1568	2858	..	..	..	..	..	..
Monthly Averages	130·7	238·1	141·2	109·6	140·9	233·8	142·6	135·1

TABLE III.

SHEWING THE NUMBER OF ADMISSIONS OF THE PRINCIPAL DISEASES, FOR THE YEAR ENDING DECEMBER 31ST, 1915; ALSO A COMPARISON WITH THE YEAR 1914, AND WITH MEAN OF THE FIVE (5) AND THIRTY-THREE (33) YEARS ENDING 1914.

MONTHS.	Scarlet Fever.	Measles.	Enteric Fever.	Typhus Fever.	Diphtheria.	Erysipelas.	Puerperal Fever.	Small Pox.	Other Diseases.	Totals.
January	161	4	5	..	12	5	3	..	19	209
February	103	4	5	..	19	4	2	..	12	149
March	106	2	6	..	20	1	1	..	14	150
April	76	1	12	..	11	..	2	..	14	116
May	76	1	3	..	10	1	2	..	12	105
June	101	1	3	..	11	3	1	..	7	127
July	96	..	3	..	12	1	4	..	14	130
August	72	..	11	..	16	1	3	..	12	115
September	82	..	16	..	12	1	..	..	12	123
October	96	..	10	..	12	5	..	..	13	136
November	50	2	8	..	25	5	2	..	15	107
December	63	..	5	..	20	2	1	..	10	101
TOTALS	1082	15	87	..	180	29	21	..	154	1568
Totals, 1914	2368	2	57	..	178	39	16	..	198	2858
Increase, 1915	..	13	30	..	2	..	5	..	..	..
Decrease, 1915	1286	..	..	..	..	10	..	..	44	1290
Mean of 5 years, 1911–15	1181·4	2·6	113·0	..	205·8	33·0	14·2	..	164·8	1714·8
Mean of 33 years, 1883–1915	845·0	15·9	145·3	5·8	159·4	23·1	7·1	18·8	93·8	1314·3

TABLE IV.

Shewing the Number of "Out Districts" to which Beds have been allocated, the Number of Beds allocated to each of those "Out Districts," the Daily Average Number of the said Beds which have been occupied, and the Number of Cases of the various Infectious Diseases which have been admitted during the Year ended December 31st, 1915.

Name of District.	Number of Beds Allocated.	Daily Average No. of Beds Occupied.	Scarlet Fever.	Enteric Fever.	Diphtheria.	Ery-sipelas.	Puerperal Fever.	Other Diseases.	Totals.
Eccles	20	8·1	41	11	33	1	..	12	98
Stretford	18	10·0	90	3	14	..	2	3	112
Swinton and Pendlebury ...	14	5·3	37	11	3	2	1	3	57
Worsley	6	1·0	7	..	..	..	..	1	8
Barton	5	6·3	44	5	2	..	..	3	54
Prestwich	5	3·2	20	..	2	..	..	1	23
Urmston	3	·3	3	..	1	..	..	..	4
Man. Port Sanitary Authority	3	·2	..	3	1	..	..	5	9
Kearsley	3	..	..	..	..	..	..	..	..
War Office	..	..	..	4	..	4	..	..	8
Totals	77	34·4	242	37	56	7	3	28	373

TABLE V.

hewing the Corrected Percentage Mortality amongst Hospital-treated cases of Scarlet Fever, Enteric Fever, and Diphtheria admitted to Hospital in 1915, and amongst the total Number of Cases of these Diseases notified to the Medical Officer of Health of Salford and certain "Out Districts" in the same Year.

Diseases.	Corrected Percentage Mortality amongst cases admitted.	Percentage Mortality amongst total cases notified to Medical Officers of Health of Salford and certain Out-Districts.
Scarlet Fever	3·2	3·1
Enteric Fever	20·4	25·0

TABLE VI.

hewing the Actual Disease from which certain Patients were, after further observation in Hospital, found to be suffering who had been admitted certified to be suffering from Scarlet Fever, Enteric Fever, or Diphtheria.

Actual Disease	Certified Scarlet Fever.	Certified Enteric Fever.	Certified Diphtheria.
denoids	..	..	1
ronchitis	..	..	2
roncho-Pneumonia	..	1	3
iphtheria	2	..	..
nteric Fever	1	..	..
rysipelas	1	..	..
rythema	1	..	..
nfluenza	..	3	..
aryngismus Stridulous	..	..	1
aryngitis	..	..	3
eningitis-Tubercular	..	2	..
orbilli	8	..	6
il	3	3	1
haryngitis	..	..	10
neumonia	..	5	..
heumatism, Acute	..	2	..
ubella	..	1	..
carlet Fever	..	..	10
imple Sore Throat	..	..	3
onsillitis	..	..	56
incents Angina	..	..	2

TABLE VII.

SHEWING THE TOTAL NUMBER ADMITTED, AND THE NUMBER OF THOSE ADMITTED WHO DIED OF SCARLET FEVER, OF BOTH SEXES, AND AT DIFFERENT AGES, FOR THE YEAR ENDING DECEMBER 31ST, 1915.

	MALES.			FEMALES.			
Ages.	No. Admitted.	No. Died.	Mortality per cent.	Ages.	No. Admitted.	No. Died.	Mortality per cent.
0 to 1	1	..	..	0 to 1	..	..	..
0 to 5	140	13	9·0	0 to 5	121	8	6·6
5 ,, 10	200	1	·5	5 ,, 10	257	7	2·7
10 ,, 15	90	1	1·1	10 ,, 15	114	2	1·7
15 ,, 20	44	1	2·3	15 ,, 20	40	..	..
20 ,, 25	14	..	..	20 ,, 25	22	..	..
25 ,, 30	6	1	16·6	25 ,, 30.	7	..	..
30 ,, 40	9	2	22-2	30 ,, 40	12	..	..
40 ,, 50	4	..	..	40 ,, 50	2	..	..
Over 50	..	..	..	Over 50	..	..	..
TOTAL ..	507	19	3·7	TOTAL ..	575	17	2·9

Total Number ADMITTED... 1082	Of these there DIED 36	Percentage Mortality.... 3·3

TABLE VIII.

Shewing the Total Number Admitted, and the Number of those Admitted who Died of Enteric Fever, of both Sexes, and at different Ages, for the Year ended December 31st, 1915.

	Males.				Females.		
Ages.	No. Admitted.	No. Died.	Mortality per cent.	Ages.	No. Admitted.	No. Died.	Mortality per cent.
0 to 1	..	..	..	0 to 1	..	..	..
0 to 5	2	..	..	0 to 5	..	..	..
5 ,, 10	9	..	..	5 ,, 10	6	3	50·0
10 ,, 15	2	..	..	10 ,, 15	4	1	25·0
15 ,, 20	6	..	..	15 ,, 20	2	..	..
20 ,, 25	8	..	..	20 ,, 25	9	3	33·3
25 ,, 30	10	3	30·0	25 ,, 30	5	2	40·0
30 ,, 40	7	2	28·2	30 ,, 40	7	1	14·3
40 ,, 50	3	2	66·6	40 ,, 50	..	..	..
Over 50	2	1	50·0	Over 50	5	..	..
Totals ..	49	8	16·3	Totals ..	38	10	26·3

Total Number Admitted..... 87	Of these there Died 18	Percentage Mortality ..... 20·6

TABLE IX.

SHEWING THE TOTAL NUMBER ADMITTED, AND THE NUMBER OF THOSE ADMITTED WHO DIED OF DIPHTHERIA, OF BOTH SEXES, AND AT DIFFERENT AGES, FOR THE YEAR ENDED DECEMBER 31ST, 1915.

MALES.				FEMALES.			
Ages.	No. Admitted.	No. Died.	Mortality per cent.	Ages.	No. Admitted.	No. Died.	Mortality per cent.
0 to 1	1	1	100·0	0 to 1	1	1	100·0
0 to 5	40	7	18·5	0 to 5	34	9	26.4
5 ,, 10	38	2	5·2	5 ,, 10	35	6	17·1
10 ,, 15	8	1	12·5	10 ,, 15	11	2	18.1
15 ,, 20	..	..	..	15 ,, 20	1	..	..
20 ,, 25	4	..	..	20 ,, 25	3	..	..
25 ,, 30	1	..	..	25 ,, 30	..	..	..
30 ,, 40	..	..	..	30 ,, 40	3	1	33·3
40 ,, 50	..	..	..	40 ,, 50	1	..	..
Over 50	1	..	..	Over 50	..	..	..
Totals ..	92	10	10·7	Totals ..	88	18	20·4

Total Number ADMITTED . . . 180	Of these there DIED 28	Percentage Mortality . . . . . 15·5

TABLE X.

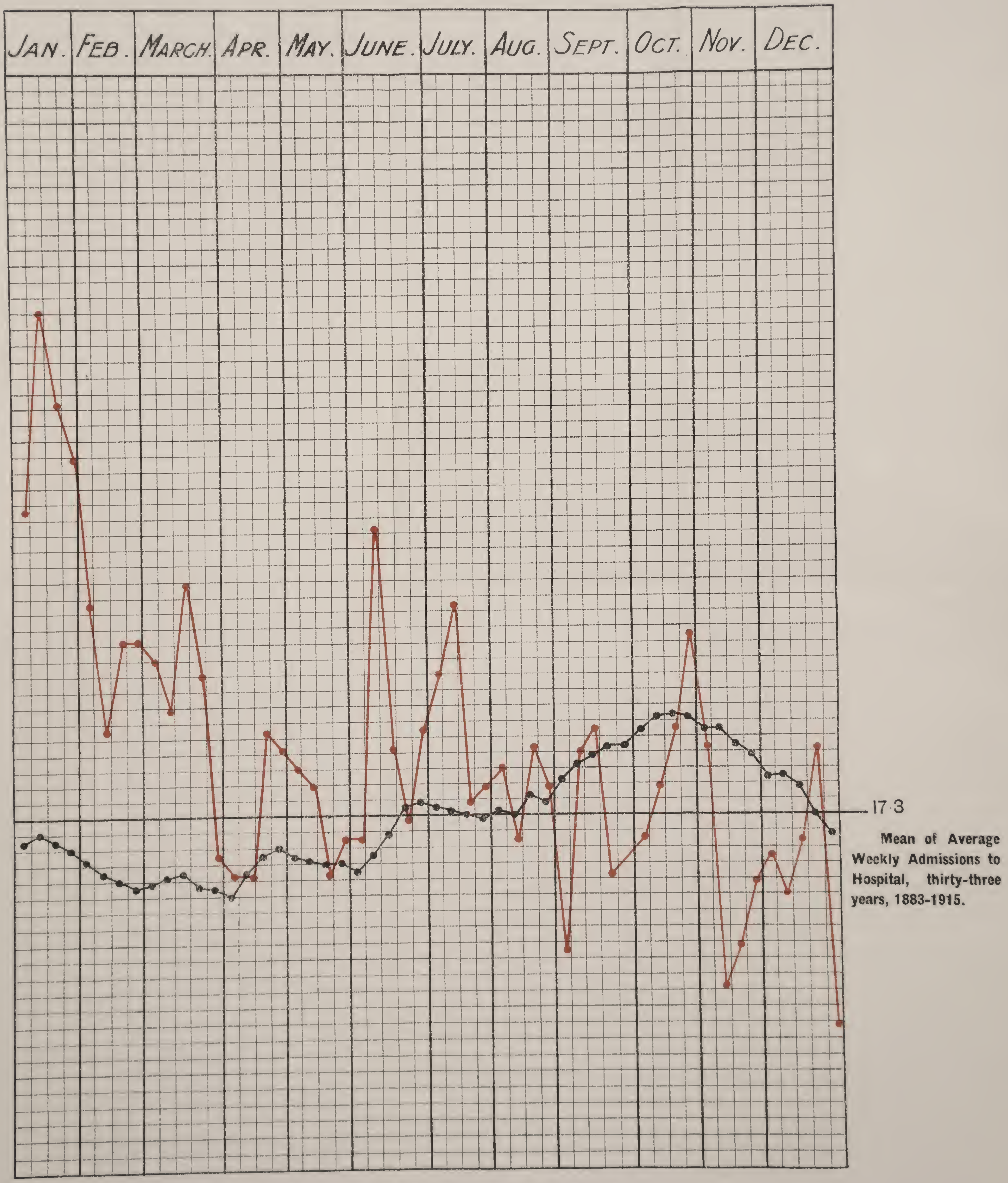
Shewing the Number of Cases of Diphtheria Admitted, and the Number of those Admitted who Died, tabulated according to the "Number of Days Ill before Admission," together with the Percentage Mortality in each Group.

Number of days ill before Admission.	1	2	3	4	5	6	7	8 and over	Totals.
Number Admitted	16	51	38	30	18	11	7	9	180
Number who Died	..	4	5	12	1	2	2	2	28
Percentage Mortality	..	7·8	13·1	40·0	5·5	18·1	28·6	22·2	15·5

COUNTY BOROUGH OF SALFORD.

SCARLET FEVER.

The Black Curve represents the percentage deviation above and below the mean of the average weekly admissions to Hospital, during the thirty-three years, 1883-1915; the Red Curve the percentage deviation of the weekly admissions during 1915, above and below the mean of the thirty-three years.

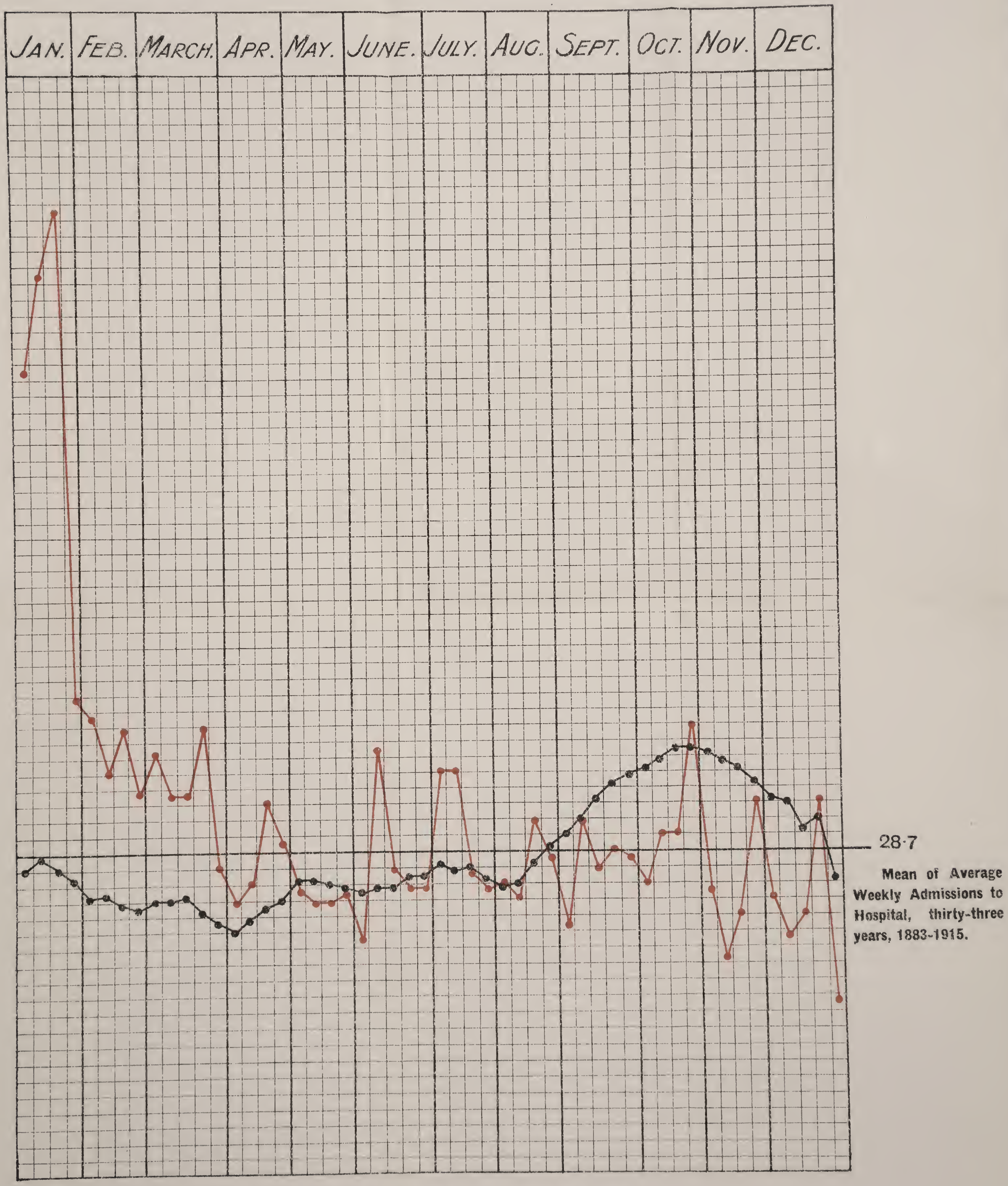


EACH VERTICAL DIVISION IS EQUAL TO 5 PER CENT.

COUNTY BOROUGH OF SALFORD.

ALL CASES.

The Black Curve represents the percentage deviation above and below the mean of the average weekly admissions to Hospital, during the thirty-three years, 1883-1915; the Red Curve the percentage deviation of the weekly admissions during 1915, above and below the mean of the thirty-three years.

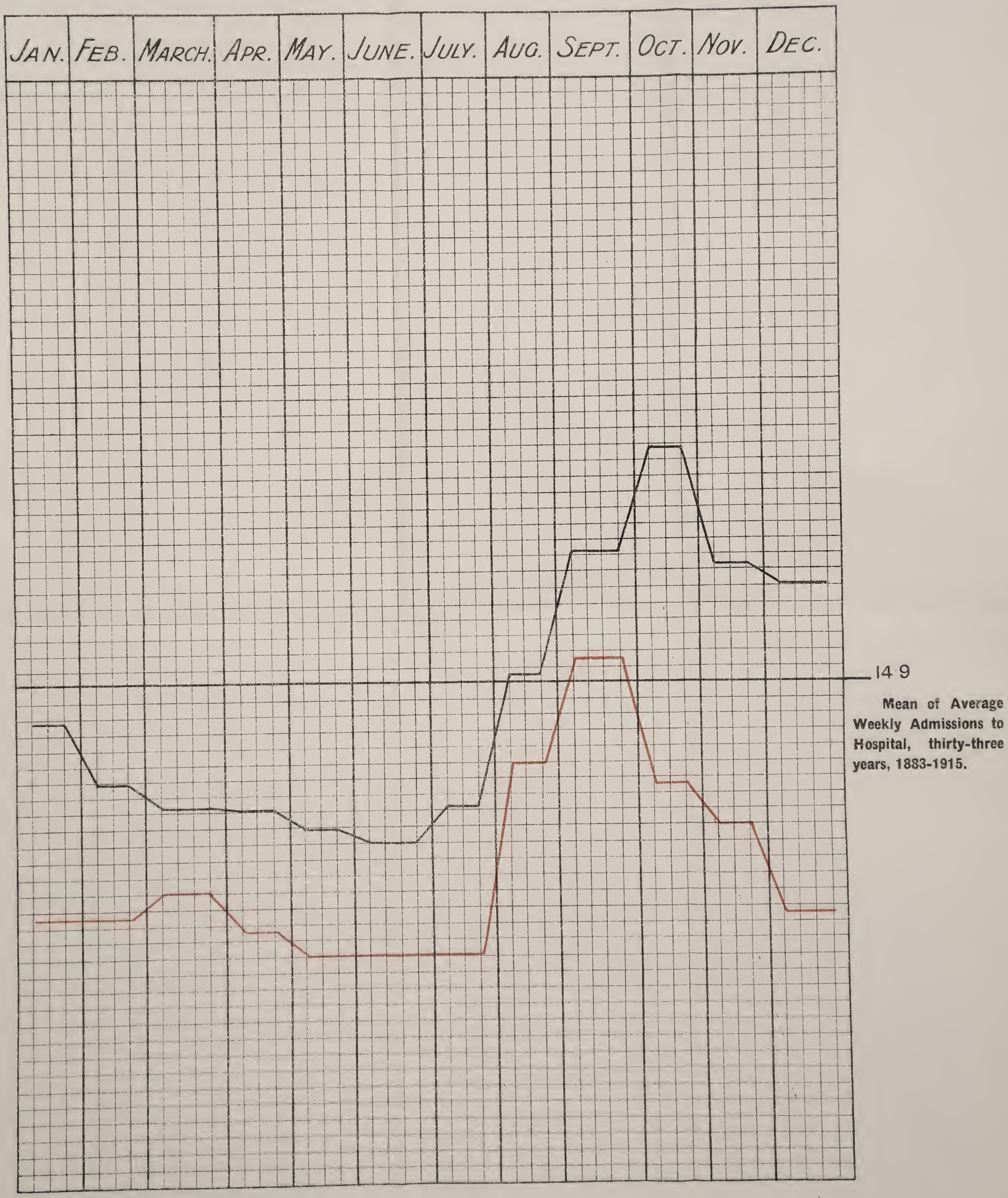


EACH VERTICAL DIVISION IS EQUAL TO 5 PER CENT.

COUNTY BOROUGH OF SALFORD.

ENTERIC FEVER.

The Black Curve represents the percentage deviation above and below the mean of the average weekly admissions to Hospital, during the thirty-three years, 1883-1915; the Red Curve the percentage deviation of the weekly admissions during 1915, above and below the mean of the thirty-three years.



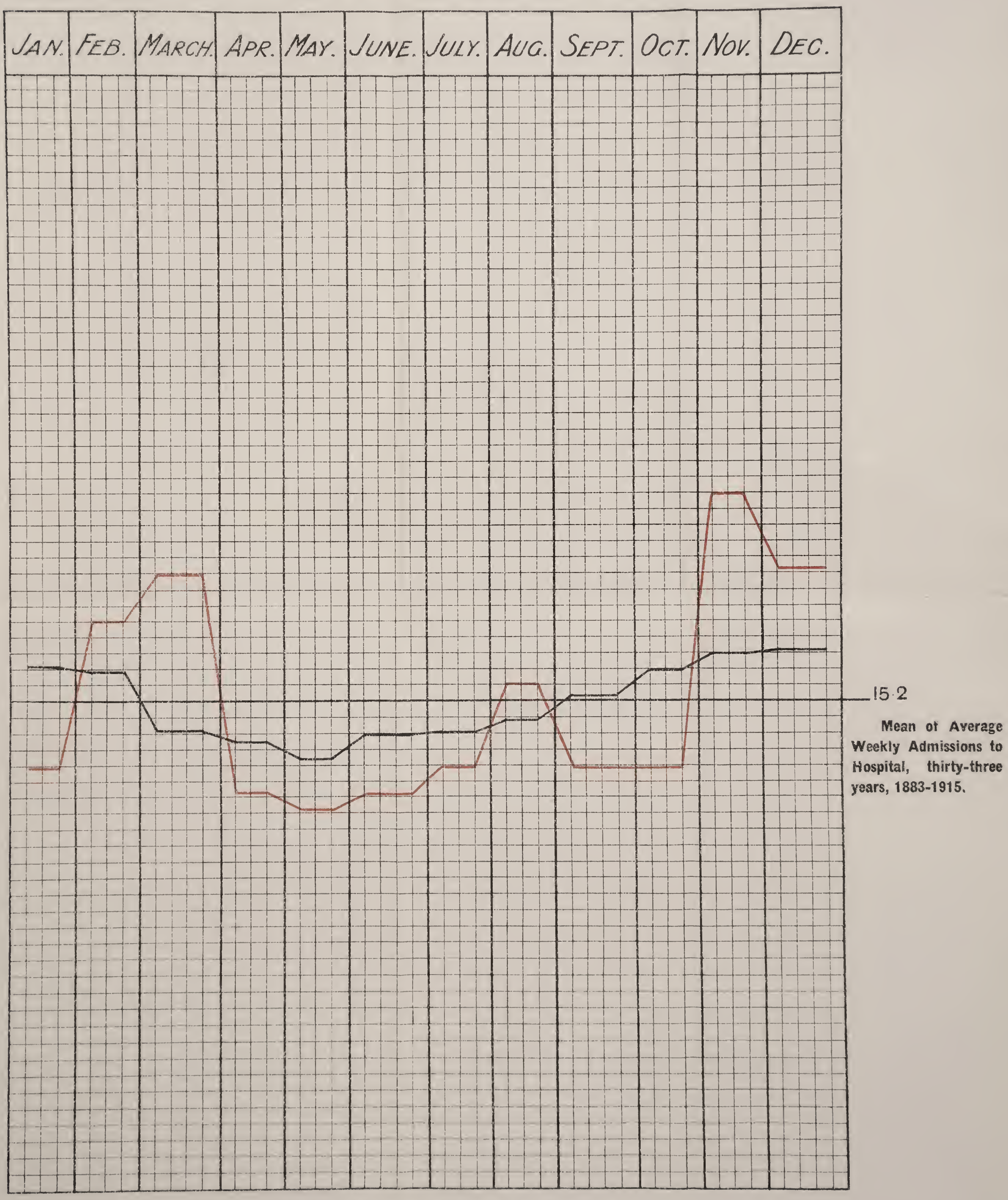
Mean of Average Weekly Admissions to Hospital, thirty-three years, 1883-1915.

EACH VERTICAL DIVISION IS EQUAL TO 5 PER CENT.

COUNTY BOROUGH OF SALFORD.

DIPHTHERIA.

The Black Curve represents the percentage deviation above and below the mean of the average weekly admissions to Hospital, during the thirty-three years, 1883-1915; the Red Curve the percentage deviation of the weekly admissions during 1915, above and below the mean of the thirty-three years.



EACH VERTICAL DIVISION IS EQUAL TO 5 PER CENT.

SECTION III.

MEDICAL INSPECTION OF SCHOOLS.

MEDICAL INSPECTION OF SCHOOLS.

This Report deals with the work of the Medical Staff of the Education Committee during the year 1915.

Details of the routine and methods employed were given in previous Reports.

Medical Staff and Scheme of Inspection.—At the beginning of the year the medical staff of the Education Committee consisted of the Medical Officer of Health, who is Medical Officer to the Committee, the Senior Medical Inspector, two whole-time Assistant Medical Inspectors, a whole-time School Dentist, and five Nurses.

During the year, owing to the war, the School Medical Inspection Staff has been seriously depleted, the Junior Medical Inspector and two of the School Nurses leaving to take up military duties; the other Assistant Medical Inspector being temporarily transferred to the Ladywell Sanatorium to act as Assistant Resident Medical Officer during the absence of Dr. Duncan on Military Service, whilst the Senior Medical Inspector has, since the middle of June, only been able to devote half his time to the medical inspection of school children, owing to his appointment as Medical Superintendent of the Tuberculosis Sanatorium.

Under the circumstances, a modification of the pre-existing scheme of medical inspection became necessary. It was therefore arranged, with the concurrence of the

Medical Officer of the Board of Education, that the actual work of medical inspection in the Schools should be carried out by the School Nurses, who should examine all the children with reference to the state of cleanliness, and, in addition, with a view to the discovery of defects requiring medical advice or treatment. Children exhibiting such defects were to be referred by the School Nurses for further examination by the Senior Medical Inspector, who would attend in the afternoons at the Central Office for the purpose.

During the first half of the year, therefore, routine inspection in the Schools was carried out by the Medical Officers, whilst after the summer holidays the modified scheme of School Inspection by Nurses, as outlined above, was in force.

The appended tables of defects found in school children are drawn up from the results obtained from inspection by Medical Officers during the first part of the year.

As, during the latter part of the year, great difficulty was found in dealing with the large number of children suffering from defective vision, Dr. Bradley, the Chairman of the Physical Care Sub-Committee, kindly came to the rescue and volunteered to devote two half days per week to testing these children for glasses.

Special attention has been devoted to the treatment of children at the School Clinic, as it was felt that this important branch of the work should not be allowed to lapse, even though inspection in the Schools should be curtailed. Thus, X-ray treatment of ringworm was carried out as usual, and the Dental and Minor Ailments Clinics were in full swing daily. The number of children treated and the number of attendances at the Minor Ailments Clinic exceeded that of the previous year.

Office Accommodation.—There are at present two inspection centres in use. The old rooms in the Education Office are still used for examination of absentees, referred chiefly by the Attendance Officers, and also for the retinoscopic examination of cases of visual defect for which it may be necessary to prescribe spectacles.

But by far the greater amount of inspection of special cases is carried out at the new inspection centre and school clinic in Regent Road.

Attending the inspection clinic at the latter centre are all cases of ringworm and other infectious skin disease, cases of early tuberculosis and delicacy, cases referred on account of pediculosis for examination and cleansing, cases of ophthalmia, &c.

In addition to the above work of inspection, a large amount of treatment is now carried out at this centre.

Cases of ringworm of the scalp are treated by means of X-rays; cases of ear and nasal disease, impetigo, &c., attend each morning for treatment, and dental treatment (including extraction and filling) is carried out daily by the School Dentist.

Presence of Parents at Medical Inspection.—Parents are invited to be present at the medical examination of their children in the schools. Their attendances at these examinations have been as follows:—

In the case of five-year-old boys 52·5 per cent of the parents attended; in five-year-old girls, 50·8 per cent; in twelve-year-old boys, 14·4 per cent; and in twelve-year-old girls, 32·9 per cent.

Summary of Examinations.

During the year 1915, 8,803 examinations were conducted by the Medical Officers of the Education Committee.

These 8,803 examinations are made up as follows :—

(*a*) Routine cases examined in school.....	2695
(*b*) Children aged 3 to 5 years examined in school	973
(*c*) Cases of visual defect examined by retinoscopy at Chapel Street Office..	131
(*d*) Absentees referred by Attendance Officers for examination at Central Office	375
(*e*) Cases of infectious skin disease, ophthalmia, &c., examined at Regent Road centre	3799
(*f*) Cases of tuberculosis and suspected tuberculosis examined at Regent Road School Clinic...............	349
(*g*) Verminous cases in which cleansing notices have been served under Section 122 of the Children Act, 1908, examined at Regent Road....	370
(*h*) Teachers, pupil teachers, and bursars examined at the two inspection centres	111

At several schools there were outbreaks of sore throat, or scarlet fever, which necessitated, over a period of time which varied in different circumstances, special daily visits of the medical staff, at which the whole of the scholars in the school were examined, for the special purpose of ascertaining their freedom from infection. These examinations have not been included in the preceding figures, as no account was taken of the number of children examined, and the examinations themselves were necessarily limited to the one object in view, and no unnecessary time was spent over them.

INSPECTIONS AT THE CENTRAL OFFICE.—Inspections at the Central Office have again occupied a very considerable proportion of the Medical Inspectors' time.

All ringworm and infectious skin disease cases, cases of ophthalmia, &c., reported by Attendance Officers or Teachers, or discovered during the course of medical inspection, have been kept under supervision and periodically inspected, and the children not allowed to return to school until judged by the Medical Inspector to be quite free from infection.

Similarly, all phthisical children reported from different sources or discovered in routine inspection are now referred to the inspection centre for periodical examination.

Observations on some Defects and Diseases in School Children.

Cleanliness.

Children's heads and bodies are examined for pediculosis both at routine medical inspection of age groups and also on the occasion of the Nurses' visits to schools, when children of all ages are submitted to inspection.

The number of children examined by the Nurses in the schools totalled 15,802. On the whole, the figures showing the state of cleanliness are satisfactory, there being an all-round diminution in the number of heads classed as "C."

Tables showing prevalence of pediculosis are hereby appended :—

PEDICULOSIS AMONGST ALL CHILDREN EXAMINED IN THE SCHOOLS BY THE MEDICAL OFFICERS DURING THE YEAR 1915.

	Boys.					Girls.				
	No. examin'd	Heads			Ver-minous bodies.	No. examin'd	Heads.			Ver-minou bodies
		*A.	B.	C.			*A.	B.	C.	
Children aged 5 years : Aggregates. .	675	603	64	8	11	640	174	419	47	8
Percentages	100	89·3	9·5	1·2	1·6	100	27·1	65·4	7·5	1·2
Children aged 12 years : Aggregates. .	645	589	54	2	17	735	213	488	34	14
Percentages	100	91·3	8·4	0·3	3·0	100	29·0	66·4	4·6	2·0

TABLES SHOWING PREVALENCE OF PEDICULOSIS IN DEPARTMENTS WHERE ALL THE SCHOLARS PRESENT WERE EXAMINED BY THE SCHOOL NURSES.

INFANTS' DEPARTMENTS.

	Boys.					Girls.				
	No. examin'd	Heads.			Ver-minous bodies.	No. examin'd	Heads.			Ver mino bodi
		*A.	B.	C.			*A.	B.	C.	
(A) Aggregate Numbers . .	3718	3413	269	36	56	3703	1147	2296	260	7
(B) Percentages . .	100	91·8	7·2	1·0	1·5	100	31·0	62·0	7·0	1·

UPPER DEPARTMENTS.

	Boys.					Girls.				
	No. examin'd	Heads.			Ver-minous bodies.	No. examin'd	Heads.			Ve min bodi
		*A.	B.	C.			*A.	B.	C.	
(A) Aggregate Numbers . .	4206	3967	221	18	148	4175	1040	2931	204	8
(B) Percentages . .	100	94·3	5·3	0·4	3·5	100	24·9	70·2	4·9	2

* Heads A—Where neither vermin nor nits are present.
,, B—Containing a small number of nits only.
,, C—Containing live vermin or numerous nits.

The accompanying table shows the work done under Section 122 of the Children Act, 1908 :—

BOYS.					GIRLS.				
umber of leansing Notices Served.	Hair Cut.		Cleansed at Mode Wheel Disinfecting Station.	Cleansed at Home.	Number of Cleansing Notices Served.	Hair Cut.		Cleansed at Mode Wheel Disinfecting Station.	Cleansed at Home.
	By Nurse.	By Parent.				By Nurse.	By Parent.		
114	2	1	50	58	256	107	102	57	64

State of Nutrition.

The state of nutrition forms a valuable index of the health and vitality of the child. Probably the two most frequent causes of malnutrition amongst Salford school children are (1) insufficient and unsuitable food, (2) early tuberculosis affecting the thoracic or abdominal lymph glands. The latter condition, which may often present no other physical signs, is generally accompanied by morning languor, distaste for breakfast, and night sweats. Amongst twelve-year-old children 35·6 per cent showed nutrition above normal, and 4·9 per cent showed malnutrition, whilst of the five-year-old children 24·5 per cent showed nutrition above normal, and 10·0 per cent showed malnutrition. This is an improvement on last year's figures.

Malnutrition appeared to be very prevalent soon after the War commenced, when there appeared to be widespread want and distress in the Borough. However, the state of nutrition of the children has since materially improved, this being no doubt due to the more liberal allowance made by the Government to soldiers' dependants, the almost entire absence of unemployment, and the more generous allowance of proteid or tissue-building foods in the free meal dietary, the amount of meat per child having been considerably increased during the year 1914.

Nose and Throat.

Out of 2,695 children examined, 504 had moderate enlargement, and 68 marked enlargement, of tonsils. 105 children had adenoids sufficient to cause moderate nasal obstruction. Other affections of the nose and throat were noted as follows :—

Condition.	5-year-old children.			12-year-old children.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Nasal Catarrh	27	19	46	4	3	7
Nasal Obstruction	10	..	10	5	5	10
Enlarged Thyroid	..	..	..	2	..	2
Nasal Discharge	..	5	5	1	1	2

External Eye Disease.

There were 23 cases of conjunctivitis, 25 of blepharitis, and 3 children with corneal opacities. Other external eye affections were noted as follows :—

Condition.	5-year-old children.			12-year-old children.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
eratitis	..	..	..	3	1	4
ataract	..	..	..	..	1	1
achrymal Obstruction	..	..	..	..	1	1
piphora	..	1	1	..	1	1
orneal Nebula	..	..	..	..	2	2
ongenital Blindness (L. eye)	..	..	..	..	1	1
trabismus	24	12	36	11	9	20

Vision.

The vision of all 12-year-old children is tested at the routine medical inspection in the Schools, the child being asked to read the test types, first with each eye separately, then both together.

The accompanying tables (**a**) and (**b**) show the vision amongst 12-year-old children who do not wear glasses, and those who do wear glasses :—

A.—WITHOUT GLASSES.

Vision.	Boys.						Girls.					
	6/6	6/9	6/12	6/18	6/24	Worse than 6/24	6/6	6/9	6/12	6/18	6/24	Worse than 6/24
Right Eye—												
Aggregate	408	62	31	25	18	17	418	54	31	27	12	12
Percentages	72·7	11·1	5·5	4·5	3·2	3·0	75·5	9·7	5·6	4·9	2·1	2·1
Left Eye—												
Aggregate	410	70	26	23	15	17	400	61	36	19	19	19
Percentages	73·1	12·5	4·6	4·1	2·7	3·0	72·2	11·0	6·6	3·4	3·4	3·4
Both Eyes together—												
Aggregate	460	54	14	16	6	11	450	51	31	12	5	5
Percentages	82·0	9·6	2·5	2·9	1·1	1·9	81·3	9·2	5·2	2·1	0·9	0·9

B.—Wearing Glasses.

Vision.	Boys.						Girls.					
	6/6	6/9	6/12	6/18	6/24	Worse than 6/24	6/6	6/9	6/12	6/18	6/24	Worse than 6/24
Right Eye—												
Aggregate	2	4	2	1	..	1	6	2	3	3	1	..
Percentages	20·0	40·0	20·0	10·0	..	10·0	40·0	13·3	20·0	20·0	6·7	..
Left Eye—												
Aggregate	5	2	1	2	..	..	8	1	1	1	2	2
Percentages	50·0	20·0	10·0	20·0	..	..	53·3	6·7	6·7	6·7	13·3	13·3
Both Eyes together—												
Aggregate	9	1	..	..	..	..	9	2	2	2	..	..
Percentages	90·0	10·0	..	..	..	..	60·0	13·3	13·3	13·3	..	..

The percentage of 5-year-old children found to be wearing glasses in school was 1·3 per cent, whilst of 12-year-old children 2·4 per cent were wearing glasses.

Ear Disease.

Forty-one cases of otorrhœa were found, a number of which were already under medical treatment, and of the remainder a number obtained marked benefit by attendance at the School Clinic for treatment.

Teeth.

The following tables show the number of children with sound teeth, and 1 to 20 decayed teeth, as observed by the Medical Inspectors in the two age groups.

Oral sepsis in the form of suppurating sinuses of the gums was most commonly noticed in connection with the temporary teeth of the five-year-old children.

Table showing Number of Decayed Teeth amongst School Children Examined by the Medical Officers during the Year 1915.

Number of Decayed Teeth.		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Boys aged 5 years.	Aggregate number of children....	104	44	54	47	52	58	60	63	46	46	27	18	17	22	8	3	2	..	1	2	1
	Percentages......	15·4	6·5	8·0	7·0	7·7	8·6	8·9	9·3	6·8	6.8	4·0	2·7	2·5	3·3	1·2	0·5	0·3	..	0·1	0·3	0·1
Girls aged 5 years.	Aggregate number of children....	109	30	59	61	62	52	50	56	33	42	40	19	16	8	9	5	4	2	2	..	1
	Percentages......	17·3	4·7	9·2	9·5	9·7	8·1	7·8	8·6	5·2	6·5	3·1	3·0	2·5	1·3	1·4	0·8	0·6	0·3	0·3	..	0·1
Boys aged 12 years.	Aggregate number of children....	109	64	102	93	78	69	55	29	13	14	7	5	3	4	..	..	..	..	..	..	..
	Percentages......	16·9	9·9	15·8	14·4	11·9	10·7	8·6	4·5	2·1	2.2	1·1	0·8	0·5	0·6	..	..	..	..	..	..	..
Girls aged 12 years.	Aggregate number of children....	126	93	137	136	82	64	30	26	21	11	5	2	1	..	1	..	..	..	..	..	..
	Percentages......	17·2	12·7	18·6	18·5	11·2	8·7	4·1	3·4	2·9	1·5	0·7	0·3	0·1	..	0·1	..	..	..	..	..	..

Inspection by School Dentist.

The School Dentist on visiting the schools, inspects the teeth of all the children aged six, seven, and eight years. All children examined last year have been followed up, and include a number of 9-year-old children. The following tables show (*a*) the number of sound and decayed teeth (both temporary and permanent) and (*b*) the actual state of the teeth and gums, and the grinding capacity, of the children examined by the School Dentist :—

TABLE A.

	Age.	Number examined.	Temporary Teeth.				Permanent Teeth.			
			Number present.	Average per child.	Number decayed.	Average per child.	Number present.	Average per child.	Number decayed.	Average per child.
Boys	6	838	15035	17·94	5953	7·1	2520	8·0	171	·2
	7	843	12996	15·41	5352	6·35	5340	6·34	510	·60
	8	881	10896	12·36	6530	7·41	8367	9·49	865	·98
	9	399	3659	9·17	1864	4·62	4578	11·47	477	1·19
	Total ...	2961	42586	14·44	19699	6·65	20805	7·0	2023	·67
Girls	6	858	14682	17·11	6535	7·61	3253	3·79	237	·27
	7	891	12849	13·29	5236	5·87	6637	7·44	577	·64
	8	839	9620	11·46	4582	5·46	8744	10·41	930	1·11
	9	352	2893	8·22	1308	3·72	4415	12·54	391	1·11
	Total ...	2940	40044	13·62	17661	6·0	23049	7·84	2135	·73
Boys and Girls...	Total ...	5901	82630	14·0	37360	6·33	43854	7·43	4158	·7

TABLE B.

	Age.	Number examined.	State of Teeth.			Condition of Gums.			Grinding Capacity.			Temporary Teeth.		Permanent Teeth.			Hypoplastic.
															Decayed.		
			Clean.	Fairly clean.	Dirty.	Healthy	Inflamed.	Septic.	Good.	Average.	Bad.	Sound.	Decayed	Sound.	Saveable	Unsaveable	
Boys	6	838	196	462	180	517	240	81	117	260	461	9082	5953	2349	155	16	101
	7	843	208	473	162	543	217	83	105	300	438	7644	5352	4830	411	99	243
	8	881	195	549	137	560	247	74	90	293	498	4366	6530	7502	632	233	348
	9	399	85	238	76	213	143	43	33	155	211	1795	1868	4101	290	187	218
	Total	2961	684	1722	555	1833	847	281	345	1008	1608	22887	19703	18782	1488	535	910
Girls	6	858	268	454	136	526	222	110	109	330	419	8147	6535	3016	206	31	67
	7	891	271	513	107	529	264	98	124	318	449	7613	5236	6060	453	126	217
	8	839	276	475	88	478	287	74	85	293	461	5038	4582	7814	88	303	477
	9	352	93	212	47	207	108	37	35	136	181	1585	1308	4024	269	122	122
	Total	2940	908	1654	378	1740	881	319	353	1077	1510	22383	17661	20914	1016	582	883
Boys & Girls	Total	5901	1592	3376	933	3573	1728	600	698	2085	3118	45270	37364	39696	2504	1117	1793

The following table shows the number of children examined by the School Dentist, the number and percentage of children to whom treatment was recommended, and the number and percentage of those whose parents wrote accepting treatment.

Age.	Number Examined.			Number recommended treatment.			Number accepted treatment.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.
6-year-old children	838	858	1,696	242	247	489	77	96	173
Percentages......	..	..	..	28·9	28·8	28·8	31·8	38·8	35·4
7-year-old children	843	891	1,734	304	313	617	120	122	242
Percentages......	..	..	...	36·1	35·1	35·6	39·4	38·9	39·2
8-year-old children	881	839	1,720	349	388	737	144	149	293
Percentages......	..	..	..	39·6	46·2	42·9	41·3	38·4	39·8
9-year-old children	399	352	751	155	127	282	60	38	98
Percentages......	..	..	..	38·8	36·1	37·5	38·7	30·0	34·7

Heart and Circulation.

In all well-marked cases of heart disease, the parents were interviewed and warned of the defect, and the children were referred for further examination in three months' time. The teachers were also warned of such defect and advised as to the child's fitness for drill or otherwise.

Lungs.

Amongst the routine inspection cases there were 142 cases of bronchial catarrh and bronchitis, 6 of tuberculosis, and 22 of suspected tuberculosis. At the same time there were very few advanced cases of phthisis, the great majority being in the early stage, the affection being probably chiefly confined to the bronchial or mediastinal lymphatic glands and giving rise to indefinite physical signs, although the children were obviously suffering from the effects of toxic absorption, such as languor, anorexia, loss of flesh, night sweats, &c. The majority of such children are adversely affected by compulsory school attendance, and the provision of open-air school accommodation becomes increasingly urgent.

Nervous Diseases.

Condition.	5-year-old children.			12-year-old children.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Incontinence of urine	3	2	5	1	1	2
Habit spasm	..	..	..	1	..	1
Infantile paralysis	..	..	..	1	..	1

Skin Diseases.

RINGWORM.—Cases of Ringworm are notified by Teachers and Attendance Officers, as well as by the Medical Inspection Staff. All cases are invited to attend periodically at the centre for inspection, and no child who has been known to have had ringworm is allowed to return to school without a certificate from the Medical Officer.

During the year 1915, 306 cases of scalp ringworm and 216 cases of body ringworm have been under supervision at the inspection clinic, and the total number of examinations in these cases amounted to 1,784.

A census of the number of cases known to be out of school suffering from this disease at corresponding periods in the last four years shows that the disease is becoming less prevalent, as witness the following figures :—

Total cases known to be suffering from tinea tonsurans in August, 1911, 450 ; August, 1912, 394 ; August, 1913, 289 ; August, 1914, 130 ; August, 1915, 72.

This very substantial decline in the prevalence of so obstinate a disease must be attributed—first, to rigid exclusion and supervision of all cases that become known ; secondly, to the fact that no child who has had ringworm is allowed to return to school without a certificate from the Medical Officer ; thirdly, to the valuable help afforded by X-ray treatment, which has been administered since the installation of the apparatus at the school clinic in April, 1913.

During the year the X-rays have been administered to 61 cases of scalp ringworm, and in all but one it was necessary to epilate the whole scalp by Kienböck's method. The children were fit to return to school again in an average of 33 days after application of rays.

It may be too much to hope that the disease will ever be entirely eradicated, but it is confidently expected that with the help of X-ray treatment the number of cases will in a few years be negligible.

Alopecia.—There have been 105 cases under supervision at the inspection centre, with a total of 497 examinations.

The practice of exclusion of these cases until disappearance of alopecia stumps and appearance of new hair growth over the affected patches has been continued.

Eczema and Impetigo.—The number of cases of these diseases under observation during the past year was 314, and the number of examinations 665.

A large number of such cases are now being dealt with very successfully at the school clinic, and many obstinate cases of impetigo are returned to school after a few days' treatment.

Scabies.—This disease is not very prevalent. There were 21 cases under supervision.

Deformities.

The following deformities were noted on routine inspection :—

Condition.	5-year-old children.			12-year-old children.		
	Girls.	Boys.	Total.	Boys.	Girls.	Total.
Scoliosis	2	..	2	..	2	2
Kyphosis	..	..	..	..	2	2
Talipes	..	..	..	1	1	2
Pigeon chest and other chest deformities	10	4	14	6	3	9
Narrow palate	2	1	3	8	..	8
High arch palate	14	10	24	30	34	64
Cleft palate	..	1	1	1	..	1
Slight thyroid enlargement	..	..	..	1	5	6
Lordosis	1	..	1	..	..	..
Umbilical hernia	1	..	1	..	..	..
Hare lip	..	1	1	..	..	..
Bow legs	7	2	9	1	..	1
Genu valgum	3	1	4	1	..	1

Infectious Disease.

A system of notification is in force whereby the Head Teachers forward to the Medical Officer of Health particulars of the cause of absence from sickness of children attending their schools. These returns are sent in weekly, and are classified in the following table :—

RETURN OF SICKNESS IN SCHOOLS DURING THE YEAR 1915.

Scarlet Fever.	Diphtheria.	Enteric Fever.	Infectious Diseases (unclassified).	Whooping Cough.	Chicken Pox.	Measles.	Ringworm.	Ophthalmia.	Sore Throat.	Bronchitis and Pneumonia.	Mumps.	Colds.	Other Diseases.
72	17	2	844	632	1264	2079	550	887	3283	1573	927	16357	12028

A comparison with the returns for the preceding year shows a greatly diminished prevalence of whooping cough, following the epidemic which was noted in 1914. There has also been a great fall in the number of cases of scarlet fever and diphtheria notified, but an increase in the number of measles cases. A marked diminution is noticed in the number of children suffering from mumps, whilst there has been a notable increase in the prevalence of bronchitis and colds.

Treatment of Defects in School Children.

Where medical inspection reveals defects calling for treatment, parents are notified of the same.

Where actual medical treatment (apart from advice and hygienic measures) is required, a printed form is delivered to the parent, stating the nature of the defect, and urgently advising the obtaining of treatment. Two duplicates of this printed form are filled in at the same time: one of these is retained at the office, whilst the second is handed to the Attendance Officer, whose duty it is to call round at the house and make enquiry as to the treatment obtained. The result of this enquiry is entered upon the form and returned to the office.

Parents are never advised to take their children to the Hospital, unless they state definitely they cannot afford private medical treatment.

The conditions for which treatment is undertaken by the Local Authority are:—

(1) Visual defects.
(2) Ringworm.
(3) Minor ailments, such as running ears, chronic nasal catarrh, impetigo, &c.
(4) Tuberculosis.
(5) Dental disease.

These are described under their respective headings.

The School Clinic.

The Regent Road centre has become established as a school clinic, and a large number of children now attend daily, both for inspection and also for treatment.

The rooms at present consist of three waiting rooms, three consulting rooms, and an X-ray room. These premises are distinct from the adjoining Tuberculosis Dispensary, though communication is preserved by means of a corridor.

The classes of ailments for which treatment is undertaken at the clinic are :—

(*a*) Ringworm of the scalp (X-ray application).

(*b*) Minor ailments, such as discharging ears, catarrhal conditions of nose and pharynx giving rise to obstruction, mouth breathing, deafness, &c., impetigo and septic conditions of the skin.

(*c*) Dental disease.

X-Ray Treatment of Ringworm.

A very complete and efficient apparatus, fitted with all necessary safeguards, was obtained from Mr. A. E. Dean, of London, at an approximate cost of £175, and the whole was fixed in position in the room set apart for the purpose by April, 1913. During the year 1915, 61 cases of ringworm were submitted to the rays.

With one exception it was found necessary to depilate the whole scalp according to the five-exposure method of Kienböck. By this method, the whole of the scalp is exposed at one sitting of approximately two hours, epilation being complete by about the end of the third week following.

After X-ray application, children are allowed to return to school, wearing a cap, as soon as epilation is complete and no ringworm stumps remain in the scalp.

Although at first many parents showed some hesitation in submitting their children to X-ray treatment, owing to stories circulated as to the evil effects produced, the parents are now, as a rule, eager to avail themselves of the opportunity.

A nominal charge of 2s. 6d. per child treated is made to the parent.

Treatment for Minor Ailments.

A large number of children are now being treated at the school clinic, and one of the Nurses at present devotes the whole of each morning to the work, which comprises the treatment of cases that would otherwise receive little or no attention, such as chronic ear discharge, chronic nasal discharge with obstructive deafness, cases of eczema, impetigo, and sores.

It is found that the great majority of these cases rapidly improve under thorough treatment, and, as a rule, even the bad cases are soon able to resume school.

The following table shows the number of new cases and attendances up to December 31st, 1915 :—

	Boys.	Girls.	Total.
New Cases	295	243	538
Attendances	4307	3237	7544

Treatment is carried out by the School Nurse under the direction of the Medical Officer, who devotes one half day per week to the supervision and re-examination of the cases.

We consider the beneficial results obtained more than justify the employment of the Nurse for this special purpose.

The Dental Clinic.

The treatment carried out at the Dental Clinic is mainly conservative in character, the aim being to preserve the first permanent teeth by filling, as soon as possible after Caries has commenced.

With this object in view the School Dentist examines the teeth of the 6–9 year age group of children in the schools, and wherever the 6-year molars require filling notification forms to this effect are sent to the parents. If parents wish to have the treatment carried out at the Dental Clinic, they sign the forms and return them to the office.

The following table shows the actual work done at the Dental Clinic.

It will be noticed there were 882 children treated at the Dental Clinic. There were 1,488 extractions of teeth, 1,096 fillings, and 88 dressings performed.

		Boys.						Girls.						Boys and Girls.					
		Age 6.	Age 7.	Age 8.	Age 9.	Casuals.	T'tal.	Age 6.	Age 7.	Age 8.	Age 9.	Casuals.	T'tal.	Age 6.	Age 7.	Age 8.	Age 9.	Casuals.	T'tal.
Number of Children Treated		56	113	144	65	88	466	64	95	145	44	68	416	120	208	289	109	156	882
Temporary Teeth.	Dressings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Extractions—																		
	(*a*) Without anæsthetic	112	152	211	96	75	646	87	180	180	93	63	583	199	332	391	169	135	1229
	(*b*) With local anæsthetic	21	35	32	8	23	119	17	23	30	9	16	95	38	58	62	17	39	214
	(*c*) With gas	..	..	1	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1
	Scalings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Permanent Teeth.	Dressings	1	12	8	2	25	48	3	9	19	2	7	40	4	21	27	4	32	88
	Extractions—																		
	(*a*) Without anæsthetic	..	..	..	..	12	12	..	..	1	..	5	6	..	..	1	..	17	18
	(*b*) With local anæsthetic	..	2	..	..	15	17	..	1	..	..	6	7	..	3	..	..	21	24
	(*c*) With gas	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	2	2
	Scalings	..	1	6	3	..	10	..	2	2	2	..	6	..	3	8	5	..	16
	Fillings—																		
	(*a*) With amalgam	41	142	240	70	15	518	81	145	225	38	3	492	122	287	465	108	18	1010
	(*b*) With cement	2	6	9	2	..	19	2	11	10	2	..	25	4	17	19	4	..	44
	(*c*) With amalgam and cement	..	8	6	2	..	16	3	8	11	4	..	26	3	16	17	6	..	42

Swimming Instruction.

During the season just closed, eleven Swimming Instructors were appointed for boys and four for girls, and the number of attendances of children during school hours at the several baths was 27,074 in the case of boys, and 23,495 in the case of girls, making a total of 50,569, as compared with 51,554 in the previous year. Reports were received from the Instructors that, of the children attending the baths, 1,062 boys and 587 girls proved themselves able to swim.

In order to encourage the children to learn swimming, the Baths Committee have continued the arrangement under which a free season ticket for the ensuing year is given to each scholar who, at the commencement of the season, is unable to swim more than ten yards, and who at the end of the season has proved himself able to swim one length of the bath. Certificates of proficiency are also awarded by the Education Committee, after an examination conducted by a Committee of Head Teachers. The number of such certificates gained during the past season was 1,109, compared with 1,000 for the previous year.

Meals to School Children.

With the consent of the Council, the Committee have again made provision for the supply of meals to school children, under the Education (Provision of Meals) Act, 1906.

The usual arrangements in regard to the cooking of the dinners and the conveyance to the feeding centres were followed.

The number of children requiring free meals has, during the greater part of the past year, been below normal.

General.

The schools were regularly visited by the Sanitary Inspectors, who have paid altogether 570 visits. Improvement in the sanitary condition of outside offices, yards, &c., has been maintained.

Twelve departments have been disinfected during the year for certain special diseases, *i.e.*, diphtheria, scarlet fever, sore throat, and measles.

TABLE S I.

HILDREN EXAMINED AT THE INSPECTION CENTRES BY THE MEDICAL INSPECTORS.

	Boys.	Girls.	Total.
New Cases	995	1391	2386
Re-examinations	1764	2181	3945
Total Examinations	2759	3572	6331

CHILDREN EXAMINED BY THE EYE SPECIALIST.

	Boys.	Girls.	Total.
Number	66	65	131
Spectacles prescribed for	45	44	89

Teachers Medically Examined	16
Pupil Teachers Medically Examined	52
,, ,, Re-examined	13
Bursars Medically Examined	43
,, ,, Re-examined	22
Sanitary Inspectors' Visits to Schools	570
Defects Found	10

Yard surfaces defective	1
W.C.'s defective or choked	3
Rain-water pipe broken	1
Gully choked	1
Flush tank defective	2
Drain inlets choked	2
	10

Schools disinfected	12

TABLE S II.

NUMBER OF CHILDREN INSPECTED 1ST JANUARY, 1915, TO 31ST DECEMBER, 1915.

A—" CODE " GROUPS.

Age.	Entrants.			Leavers.	Grand Total.
	3 & 4.	5 & 6.	Total.	12*	
Boys	514	675	1189	645	1834
Girls	459	640	1099	735	1834
Totals	973	1315	2288	1380	3668

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* Included amongst the 12 year age group are a few children over that age, who were absent from School at the previous medical inspection.

TABLE S III.

MEDICAL INSPECTION IN THE SCHOOLS.

A.—FIVE-YEAR-OLD SCHOLARS.

	Boys.	Girls.	Total.
Number Examined	675	640	1315
Number with *defects	522	438	960
Number referred	25	18	43
Percentage with *defects	77·3	67·8	72·6
Percentage referred	3·7	2·8	3·5

B.—TWELVE-YEAR-OLD SCHOLARS.

	Boys.	Girls.	Total.
Number examined	645	735	1380
Number with *defects	369	384	753
Number referred	14	23	37
Percentage with *defects	57·2	52·3	54·8
Percentage referred	2·2	3·1	2·7

C.—ENTRANTS UNDER 5 YEARS OF AGE.

	Boys.	Girls.	Total.
Number examined	514	459	973

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* The term "defect" includes conditions set forth in Table S IV

TABLE 8 IV.

CLASSIFICATION OF DEFECTS FOUND IN CHILDREN EXAMINED IN THE SCHOOLS DURING THE YEAR 1915.

Condition.		5-Year-old Children.				12-Year-old Children.				Total.			
		Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.
Total Inspected		675	640	1315	..	645	735	1380	..	1320	1375	2695	..
Clothing	Satisfactory	481	522	1003	76·3	435	640	1075	77·9	916	1162	2078	77·1
	Unsatisfactory	194	118	312	23·7	210	95	305	22·1	404	213	617	22·9
Footgear	Satisfactory	506	520	1026	78·0	459	640	1099	79·8	965	1160	2125	78·9
	Unsatisfactory	169	120	289	22·0	186	95	281	20·2	355	215	570	21·1
Cleanliness of Head	Clean	603	174	777	59·0	589	213	802	58·1	1142	387	1579	58·6
	Nits only	64	419	483	36·7	54	488	542	39·2	118	907	1025	38·0
	Pediculi	8	47	55	4·3	2	34	36	2·7	10	81	91	3·4
Cleanliness of Body	Clean	531	513	1044	79·4	524	601	1123	81·6	1055	1114	2169	80·5
	Dirty	133	119	252	19·2	104	120	224	16·2	237	239	476	17·7
	Pediculi	11	8	19	1·4	17	14	31	2·2	28	22	50	1·8
Nutrition	Excellent	160	162	322	24·5	192	299	491	35·6	352	461	813	30·1
	Normal	443	419	862	65·5	414	408	822	59·5	857	827	1684	62·5
	Below Normal	65	56	121	9·2	38	28	66	4·8	103	84	187	7·0
	Bad	7	3	10	0·8	1	..	1	0·1	8	3	11	0·4

Classification of Defects found in Children—*Continued.*

Condition.		5-Year-old Children.				12-Year-old Children.				Total.			
		Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.
Nose and Throat	Mouth Breathers	78	40	118	8·9	33	37	70	5·8	111	77	188	6·9
	Tonsils slightly enlarged..	154	119	273	20·8	105	126	231	16·6	259	245	504	18·7
	,, much enlarged .	23	17	40	3·0	6	22	28	2·0	29	39	68	2·5
	Adenoids Slight	32	26	58	4·4	22	25	47	3·4	54	51	105	3·9
	,, Marked	..	..	..	..	..	..	..	..	..	..	..	..
External Eye Disease..	No disease	625	613	1238	94·1	627	710	1337	96·9	1252	1323	2575	95·5
	Blepharitis	10	7	17	1·3	1	7	8	0·6	11	14	25	0·9
	Conjunctivitis	14	5	19	1·5	2	2	4	0·3	16	7	23	0·9
	Corneal Opacities	1	2	3	0·2	..	..	..	..	1	2	3	0·1
	Other Disease	25	13	38	2·9	15	16	31	2·2	40	29	69	2·6
Ear Disease	No Disease............	661	625	1286	97·5	638	723	1361	98·5	1299	1348	2647	98·0
	Otorrhœa R	8	9	17	1·3	4	2	6	0·4	12	11	23	0·9
	,, L	2	6	8	0·6	3	7	10	0·7	5	13	18	0·6
	Other Disease	5	3	8	0·6	1	4	5	0·4	6	7	13	0·5

TABLE S IV.—*Continued.*

CLASSIFICATION OF DEFECTS FOUND IN CHILDREN—*Continued.*

Condition.		5-Year-old Children.				12-Year-old Children.				Total.			
		Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.
Teeth	Sound	107	110	217	16·5	107	127	234	17·0	214	237	451	16·7
	Less than four decayed	151	150	301	22·9	262	363	625	45·3	413	513	926	34·4
	Four or more decayed	417	380	797	60·6	276	245	521	37·7	693	625	1318	48·9
	Sepsis	9	13	22	1·6	3	9	12	0·4	12	16	28	1·1
Heart and Circulation	No Disease	635	587	1222	93·0	609	660	1269	92·0	1244	1247	2491	92·5
	Organic Disease	1	1	2	0·2	2	..	2	0·1	3	1	4	0·2
	Anæmia	16	25	41	3·1	9	37	46	3·3	25	62	87	3·2
	Other Defects	23	27	50	3·7	25	38	63	4·6	48	65	113	4·1
Lungs	No Disease	589	583	1172	89·1	633	719	1352	97·9	1222	1302	2524	93·5
	Chronic Bronchitis and Bronchial Catarrh	78	49	127	9·6	7	8	15	1·1	85	57	142	5·3
	Tuberculosis	3	3	6	0·5	..	..	..	..	3	3	6	0·3
	Tuberculosis suspected	4	5	9	0·7	5	8	13	1·0	9	13	22	0·8

TABLE S IV.—*Continued.*

Classification of Defects found in Children—*Continued.*

Condition.		5-Year-old Children.				12-Year-old Children.				Total.			
		Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.
Nervous System	No Disease	669	637	1306	99·3	643	734	1377	99·8	1312	1371	2683	99·5
	Chorea................	3	1	4	0·3	..	..	..	..	3	1	4	0·2
	Other Disease	3	2	5	0·4	2	1	3	0·2	5	3	8	0·3
Skin	No Disease	631	609	1240	94·3	628	717	1345	97·5	1259	1326	2585	95·9
	Ringworm, Body	6	3	9	0·7	3	6	9	0·6	9	9	18	0·6
	,, Head	4	1	5	0·4	..	..	..	..	4	1	5	0·2
	Impetigo	20	18	38	2·9	4	5	9	0·6	24	23	47	1·8
	Other Disease	14	9	23	1·7	10	7	17	1·3	24	16	40	1·5
Rickets	No Disease...........	649	630	1279	97·3	636	733	1369	99·1	1285	1363	2648	98·2
	Slight	23	9	32	2·4	9	2	11	0·9	32	11	43	1·6
	Marked	3	1	4	0·3	..	..	..	..	3	1	4	0·2
Deformities	No Deformity	634	619	1253	95·3	594	687	1281	92·8	1228	1306	2534	94·1
	Deformities present	41	21	62	4·7	51	48	99	7·2	92	69	161	5·9

TABLE S IV.—*Continued.*

CLASSIFICATION OF DEFECTS FOUND IN CHILDREN—*Continued.*

Condition.		5-Year-old Children.				12-Year-old Children.				Total.			
		Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.
Tuberculosis : Non-Pulmonary....	No Disease	674	639	1313	99·9	645	735	1380	100·0	1319	1374	2693	99·9
	Glandular	1	1	2	0·1	..	..	..	..	1	1	2	0·1
Speech..............	Not Defective	668	636	1304	99·1	636	732	1368	99·1	1304	1368	2672	99·1
	Defective Articulation ..	3	3	6	0·5	7	3	10	0·8	10	6	16	0·6
	Stammering	4	1	5	0·4	2	..	2	0·1	6	1	7	0·3
Mental Condition	Not Defective	674	635	1309	99·6	639	730	1369	99·2	1313	1365	2678	99·4
	Mentally Defective	1	5	6	0·4	6	5	11	0·8	7	10	17	0·6
Vision	6/6 each eye	..	..	..	..	469	459	928	81·4	..	..	..	..
	6/6 R	..	..	..	..	410	424	834	73·1	..	..	..	..
	6/6 L	..	..	..	..	415	408	823	72·1	..	..	..	..
	6/9 R	..	..	..	..	66	56	122	10·7	..	..	..	..
	6/9 L	..	..	..	..	172	62	134	11·7	..	..	..	..

TABLE S IV.—*Continued.*

CLASSIFICATION OF DEFECTS FOUND IN CHILDREN—*Continued.*

Condition.		5-Year-old Children.				12-Year-old Children.				Total.			
		Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.
Vision (*continued*)	6/12 R	..	..	..	..	33	34	67	5·8	..	..	..	..
	6/12 L	..	..	..	..	27	37	64	5·6	..	..	..	..
	6/18 R	..	..	..	..	26	30	56	4·9	..	..	..	..
	6/18 L	..	..	..	..	25	20	45	3·9	..	..	..	..
	6/24 R	..	..	..	..	18	13	31	2·7	..	..	..	..
	6/24 L	..	..	..	..	15	21	36	3·1	..	..	..	..
	Worse than 6/24 R	..	..	..	..	18	12	30	2·6	..	..	..	..
	,, 6/24 L	..	..	..	..	17	21	38	8·3	..	..	..	..
Squint		24	12	36	2·7	11	9	20	1·5	35	21	56	2·1
Hearing	Normal	667	640	1307	99·4	633	722	1355	98·2	1300	1362	2662	98·8
	Impaired, R	5	1	6	0·4	10	7	17	1·2	15	8	23	0·8
	,, L	6	1	7	0·5	8	10	18	1·3	14	11	25	0.9

TABLE S V.

SUMMARY OF DEFECTS FOUND IN INFANT SCHOLARS THREE TO FIVE YEARS OF AGE.

	Boys.	Girls.	Total.
Skin Diseases—			
Tinea Tonsurans	1	..	1
Other Skin Affections	7	6	13
Glands Enlarged (Unimportant)	122	125	247
Eye Diseases (Strabismus)	3	4	7
Pediculosis—			
Head A.	444	211	655
B.	65	221	286
C.	5	27	32
Body	1	1	2
Rickets	6	2	8

TABLE S VI.

CLASSIFICATION OF SPECIAL CASES EXAMINED BY THE MEDICAL INSPECTORS, AT THE INSPECTION CENTRES, DURING THE YEAR 1915.

	Boys.		Girls.		Total Examinations.
	1st Exam.	Re-examined.	1st Exam.	Re-examined.	
Number examined	955	1764	1391	2181	6291
Skin Diseases—					
Ringworm, head	115	424	191	449	1179
,, body	100	223	116	166	605
Scabies	7	19	14	26	66
Eczema	8	24	25	32	89
Impetigo	103	177	178	209	667
Alopecia	42	169	63	223	497
Psoriasis	1	3	1	4	9
Sores	6	8	7	10	31
Lupus	1	3	..	1	5
Xeroderma	..	..	..	1	1
Herpes	2	3	..	..	5
Boils	4	1	3	3	11
Dermatitis	3	10	4	9	26
Septic Sores	12	21	11	12	56
Kerion	1	1	..	..	2
Pustular Rash	1	4	..	..	5
Seborrhœa	1	4	9	2	16
Urticaria	1	1	..	..	2
Erythema	1	1	1	3	6
Acne..	..	..	1	..	1
Pediculosis—					
Head	2	7	37	88	134
Body	1	..	3	2	6
Mental Condition—					
Epilepsy	2	9	8	10	29
Mentally Defective	10	3	1	1	15
Aphasia	..	..	1	..	1
Backward	..	..	1	..	1

TABLE S VI.—*Continued.*

Classification of Special Cases—*Continued.*

	Boys.		Girls.		Total Examinations.
	1st Exam.	Re examined.	st Exam.	Re-examined.	
Nose and Throat—					
Rhinitis	3	2	5	5	15
Nasal Obstruction	1	3	2	3	9
Tonsilitis	21	30	51	120	222
Laryngitis	1	1	2	4	8
Pharyngitis	..	..	2	1	3
Polypus	..	..	2	5	7
Tonsils Enlarged	11	17	13	22	63
Adenoids	5	8	3	8	24
Goitre	2	2	..	..	4
Thyroid insufficiency	..	..	1	1	2
Nasal Catarrh	8	4	4	3	19
Deflected Septum	..	1	..	..	1
Tubercular Laryngitis	1	..	1	2	4
External Eye Diseases—					
Strabismus	..	2	4	3	9
Blepharitis	12	38	8	39	97
Conjunctivitis	32	112	47	96	284
Corneal Ulcer and Nebula	3	18	7	18	46
Keratitis	2	17	6	40	65
Cataract	..	..	1	..	1
Leucoma	1	2	2	..	5
Amblyopia	..	..	..	2	2
Hordeolum	..	1	..	..	1
Trichiasis	..	..	..	1	1
Ametropia	..	..	1	..	1
Vision—					
Very defective	6	5	26	4	41
Blind	1	..	1	..	2
Ear Disease—					
Otorrhœa and Otitis Media	28	28	33	43	132
Aural Polypus	..	..	1	..	1
Cerumen	..	..	1	1	2

TABLE S VI.—*Continued.*

CLASSIFICATION OF SPECIAL CASES—*Continued.*

	Boys.		Girls.		Total Examinations.
	1st Exam.	Re-examined	1st Exam.	Re-examined.	
earing—					
Impaired	2	4	8	9	23
Deaf and Dumb	..	..	1	..	1
peech—					
Defective	..	2	1	3	6
eart Disease—					
Congenital Heart Disease	..	..	1	7	8
Mitral Disease	4	15	15	24	58
Cardiac Disease	4	6	3	4	17
Functional Heart Murmur	..	..	..	1	1
Dilated Heart	..	3	..	5	8
Other Heart Diseases	..	6	5	5	16
ungs—					
Phthisis (?)	33	23	41	41	138
Phthisis	16	8	8	14	46
Bronchitis	11	6	13	13	43
Pneumonia	2	1	1	..	4
Pleurisy	1	1	..	..	2
Emphysema	..	..	..	1	1
ickets	7	5	1	..	13
uberculosis—					
Bone and Joint	4	1	5	2	12
Abdominal	4	10	2	2	18
Glands	12	46	19	28	105
Nervous System—					
Infantile Paralysis	1	..	1	..	2
Convulsions	2	4	..	..	6
Chorea	15	26	25	44	110
Incontinence of Urine	1	1	1	1	4
Facial Paralysis	..	..	1	3	4
Nervousness	2	6	3	6	17
Neuritis	..	..	..	2	2
Habit Spasm	1	2	..	..	3
Headache	4	3	4	8	19

TABLE S VI.—*Continued.*

CLASSIFICATION OF SPECIAL CASES—*Continued.*

	Boys.		Girls.		Total Examinations.
	1st Exam.	Re-examined.	1st Exam.	Re-examined.	
Delicate	36	66	47	145	294
Anæmia and Debility	9	28	37	52	126
Fainting	4	9	1	5	19
Malformations—					
Wry Neck	1	8	2	..	11
High Palate	..	..	1	1	2
Lateral Curvature of the Spine	2	3	2	7	14
Talipes	..	..	1	..	1
Burn and Scald Scars	..	2	..	..	2
Other Diseases—					
Rheumatism	4	3	5	24	36
Gastric Catarrh	1	7	5	9	22
Tetany	..	3	..	..	3
Nephritis	3	7	6	3	19
Food Poisoning	..	..	1	3	4
Fœcal Fistula	1	1	2	..	4
Diarrhoea	1	..	1	..	2
Nausea and Vomiting	1	3	..	..	4
Oral Sepsis	..	..	1	..	1
Biliousness	2	7	1	..	10
Abscess	2	6	3	9	20
Swollen Glands	2	4	3	..	9
Puberty	..	..	2	..	2
Osteo-Myelitis	1	..	..	..	1
Alveolar Abscess	2	1	..	..	3
Colds	1	..	..	..	1
Oedema	1	3	1	3	8
Ulcerated Mouth	..	..	2	1	3
Biliary Catarrh	1	..	..	..	1
Prolapsus Ani	2	..	..	..	2
Ulcers	..	..	1	1	2

TABLE S VI.—*Continued.*

CLASSIFICATION OF SPECIAL CASES—*Continued.*

	Boys.		Girls.		Total Examinations.
	1st Exam.	Re-examined.	1st Exam-	Re-examined.	
ther Diseases—(*continued*).					
Malnutrition	..	4	1	1	6
Contacts with Infectious Disease	2	1	2	1	6
Albino	1	..	..	..	1
Whitlow Finger	1	2	1	..	4
Fractured Leg	..	2	..	..	2
Chapped Fingers	..	..	1	1	2
Umbilical Hæmorrhage	1	2	..	..	3
Appendicitis (?)	..	..	1	4	5
fectious Disease—					
Chicken Pox	4	3	3	3	13
Mumps	4	4	4	1	13
Whooping Cough	2	2	3	..	7
German Measles	..	..	1	..	1
Influenza	5	1	1	1	8
t for School	166	..	184	..	350

TABLE S VII.

SUMMARY OF CASES SEEN BY THE OPHTHALMIC OFFICER AT THE EDUCATION OFFICE DURING THE YEAR 1915.

A.—REFRACTIONS.

	Boys.	Girls.	Total.
Hypermetropia	20	17	37
Hypermetropic Astigmatism	11	8	19
Myopia	12	10	22
Myopic Astigmatism	3	..	3
Mixed Astigmatism	4	7	11
Anisometropia	..	1	1
Nil	9	11	20
TOTALS	59	54	113

B.—DISEASES OF THE EYE.

	Boys.	Girls.	Total.
Keratitis	..	3	3
Blepharitis	1	1	2
Conjunctivitis	4	4	8
Corneal Opacities	..	1	1
Albino	1	..	1
Optic Neuritis	2	..	2
Epiphora	..	1	1
Ciliary Strain	1	..	1
Nystagmus	1	..	1
Strabismus	8	6	14
Congenital Amblyopia	1	..	1
TOTALS	19	16	35

TABLE S VIII.

BLIND, DEAF, AND DEFECTIVE CHILDREN.

NEW CASES SENT TO SPECIAL SCHOOLS DURING 1915

	Boys.	Girls.	Total.
Residential Blind School	1	..	1
Deaf and Dumb Institution	1	..	1
Day Blind School	2	1	3
TOTALS	4	1	5

TABLE S IX.

TOTAL NUMBER OF CHILDREN MAINTAINED IN INSTITUTIONS AT THE PART COST OF THE COUNCIL.

Name of Institution.	Boys.	Girls.	Total.
Henshaw's Blind Asylum, Manchester	3	5	8
Catholic Blind Asylum, Liverpool	2	..	2
Homes for the Blind, Fulwood, Preston	2	2	4
Manchester Day Classes for the Blind	6	15	21
Manchester Schools for the Deaf and Dumb	13	3	16
Thomasson Memorial School, Bolton	1	..	1
St. John's Institution for the Deaf and Dumb, Boston Spa	3	6	9
Jews Deaf and Dumb, London	..	1	1
Soss Moss Epileptic Colony School	2	..	2
Pontville R. C. Special School, Ormskirk	1	..	1
TOTALS	33	32	65

TABLE S X. A.

Examination of Bursars, 1915.

A.—Girls.

Number examined	39

Previous History.

Had Measles	35
,, Whooping Cough	16
,, Enteric Fever	1
,, Scarlet Fever	9
,, Diphtheria	2
,, Chicken-pox	19
,, Rheumatism	2
,, Pneumonia	1
,, Mumps	1
,, Tonsils removed	3
,, Croup	1
,, Appendicitis	1
Vaccinated at Infancy and took	35
,, ,, ,, without result	1
,, 1915	4
Unvaccinated	3

TABLE 8 X. A.—*Continued.*

EXAMINATION OF BURSARS.—GIRLS.—*Continued.*

DEFECTS FOUND.

Phthisis (?)	2
Narrow Palate	1
Narrow Chest	1
Bad Teeth	9
Enlarged Tonsils	1
Nits in hair	4

Vision—

Wearing Glasses	9

A.—BURSARS NOT WEARING GLASSES.—(30).

Vision at 6 metres.	Number with vision = 6/6	Number with vision = 6/9	Number with vision = 6/12	Number with vision = 6/18	Number with vision = 6/24	Number with vision worse than = 6/24
Right Eye	19	5	3	1	1	1
Left Eye	17	7	..	1	2	3
Both Eyes together	21	4	2	1	1	1

TABLE S X. A.—*Continued.*

B.—BURSARS WEARING GLASSES.—(9).

Vision at 6 metres. (With glasses).	Number with vision = 6/6	Number with vision = 6/9	Number with vision = 6/12	Number with vision = 6/18	Number with vision = 6/24	Number with vision worse than = 6/24
Right Eye	3	2	4	..	..	..
Left Eye	2	2	4	..	..	1
Both Eyes together ...	6	2	1	..	..	..

REFRACTIVE ERRORS IN GIRLS WEARING GLASSES.

Myopia..................................	6
Hypermetropia	1
Mixed Astigmatism	2

RECOMMENDATIONS TO BE CARRIED OUT BEFORE MEDICALLY PASSED.

3 Candidates to be vaccinated.
1 ,, to be re-vaccinated.
9 ,, to see Dentist.
4 ,, to have nits removed.
1 ,, refused treatment.
3 ,, to have eyes tested.
4 ,, to be seen *re* tonsils.

TABLE S X. B.

EXAMINATION OF BURSARS, 1915.—*Continued.*

B.—BOYS.

Number examined	4

PREVIOUS HISTORY.

Had Measles	3
,, Scarlet Fever	2
,, Chicken Pox	1
,, Bright's Disease	1
Vaccinated at Infancy and took	3
,, without result	1
,, 1915	1

DEFECTS FOUND.

Impaired Hearing	1

A.—BURSARS not Wearing Glasses.—(4).

Vision at 6 metres.	Number with vision = 6/6	Number with vision = 6/9	Number with vision = 6/12	Number with vision = 6/18	Number with vision = 6/24	Number with vision = 6/36
Right Eye	4	..	..	..	..	..
Left Eye	4	..	..	..	..	..
Both Eyes together	4	..	..	..	..	..

RECOMMENDATIONS TO BE CARRIED OUT BEFORE MEDICALLY PASSED.

1 Candidate to see Doctor *re* Tonsils.

1 Candidate to be vaccinated.

TABLE S XI.

EXAMINATION OF PUPIL TEACHERS, 1915.

BOYS AND GIRLS.

	Boys.	Girls.	Total.
Number Examined	8	44	52
Wearing Spectacles	2	4	6
Had Tonsils removed	1	2	3
,, Tonsilitis	..	2	2
,, Influenza	..	2	2
,, Sore Throat	1	1	2
,, Alveolar Abscess	..	2	2
,, Anæmia	..	1	1
,, Enlarged Thyroid	1	..	1
,, Erysipelas	1	..	1

TABLE S XI.—*Continued.*

EXAMINATION OF PUPIL TEACHERS, 1915—*Continued.*

RECOMMENDATIONS TO BE CARRIED OUT BEFORE MEDICALLY PASSED.

11	Candidates	to see Dentist.
2	,,	to be tested for glasses.
3	,,	to be re-vaccinated.
2	,,	to have nits removed.
4	,,	to see Doctor *re* tonsils.
1	,,	see Doctor *re* weak throat.
1	,,	to see Doctor *re* ear disease.

DEFECTS FOUND.

	Boys.	Girls.	Total.
Teeth—Over 4 decayed	2	5	7
Nits in Hair	..	3	3
Gland Scars	1	2	3
Otorrhœa	..	1	1
Impaired Hearing	..	2	2
Goitre	..	1	1
Anæmia	..	1	1
Scoliosis	..	1	1

VISION.

(A).—PUPIL TEACHERS.—GIRLS.—NOT WEARING GLASSES.

Vision at 6 metres.	Number with vision = 6/6	Number with vision = 6/9	Number with vision = 6/12	Number with vision = 6/18	Number with vision = 6/24	Number with vision worse than = 6/24
Right Eye	34	6	..	..	..	..
Left Eye	33	7	..	..	..	..
Both Eyes together ...	33	6	1	..	..	..

(B).—PUPIL TEACHERS.—BOYS.—NOT WEARING GLASSES.

Vision at 6 metres.	Number with vision = 6/6	Number with vision = 6/9	Number with vision = 6/12	Number with vision = 6/18	Number with vision = 6/24	Number with vision worse than = 6/24
Right Eye	4	1	..	1	..	..
Left Eye	4	1	..	1	..	..
Both Eyes together....	3	2	..	1	..	..

PUPIL TEACHERS.—GIRLS.—WEARING GLASSES.

Vision at 6 metres.	Number with vision = 6/6	Number with vision = 6/9	Number with vision = 6/12	Number with vision = 6/18	Number with vision = 6/24	Number with vision worse than = 6/24
Right Eye ..	2	1	..	..	1	..
Left Eye	1	1	1	..	1	..
Both Eyes together....	1	2	..	..	..	1

VISION.—*Continued.*

REFRACTIVE ERROR IN GIRLS WEARING GLASSES.

Myopia	1
Myopic Astigmatism	1
Hypermetropia	2

PUPIL TEACHERS—BOYS—WEARING GLASSES.

Vision at 6 metres.	Number with vision = 6/6	Number with vision = 6/9	Number with vision = 6/12	Number with vision = 6/18	Number with vision = 6/24	Number with vision worse than = 6/24
Right Eye	1	1	..	..	..	..
Left Eye	..	1	1	..	..	..
Both Eyes together	1	1	..	..	..	..

REFRACTIVE ERROR IN BOYS WEARING GLASSES.

Myopia	1
Hypermetropic Astigmatism	1

SECTION IV.

VETERINARY INSPECTOR'S REPORT

SECTION IV.

VETERINARY INSPECTOR'S REPORT

Swine Fever Order, 1908.

Two outbreaks of Swine Fever occurred during the year 1915. The circumstances of the first case were as follows :—

Six pigs were taken to a private slaughterhouse in the Borough, and the occupiers of the slaughterhouse noticed that the animals were ailing on their arrival. These animals were slaughtered, and a notification sent to this Office as required by the Slaughterhouse Bye-laws. An examination of the carcases and offal revealed lesions indicative of Swine Fever in two carcases.

The Board of Agriculture and Fisheries were at once notified. Subsequent inquiries by the Board of Agriculture and Fisheries' Inspector showed that these animals were part of a lot connected with outbreaks in the Manchester Pig Market, and also on the feeders' premises at Rhyl.

The carcases of these animals were destroyed, and disinfection of the slaughterhouse, floats, &c., carried out as required by the Swine Fever Order.

The second case occurred in the same slaughterhouse, and was discovered during the course of Meat Inspection. The Board of Agriculture and Fisheries were notified, and the usual precautions were taken to prevent the spread of the disease.

Swine Fever (Regulation of Movement) Order, 1908.

The following summary shows the number of movement licenses dealt with under the above Order, and the number of pigs:—

	Number of Licenses.	Number of Pigs.
Store Pigs licensed into the Borough	67	775
Fat Pigs licensed into Cattle Market	18	99
Fat Pigs licensed to slaughterhouses in the Borough	256	10,859
Fat Pigs licensed to slaughterhouses outside the Borough	16	97
Store Pigs licensed out of the Borough	1	1
	358	11,831

Parasitic Mange Order, 1911.

This Order, which had previously been suspended, was re-enforced on the 28th day of March, 1915. Since that date, four outbreaks of Parasitic Mange have been reported.

Five horses were found to be affected, and eighteen horses stabled with the diseased animals were examined, and found to be free from the disease.

In every case, the animals affected were isolated and the premises and utensils thoroughly disinfected.

Legal proceedings were instituted in one case for exposing a diseased animal in the street; a penalty of 19s. 6d., including costs, was imposed.

Sheep Dipping (Scotland and North of England) Order, 1915.

During the first dipping period as defined in this Order, the dipping of 121 Irish sheep was supervised. No sheep were dipped in the Borough during the second period.

Cattle Market.

The Market has been visited and inspected each market day throughout the year, and no cases of scheduled disease were discovered.

The number of animals exhibited for sale in the Salford Cattle Market during 1915 is as follows:—

79,391	Cattle.
489,297	Sheep.
2,921	Calves.
70	Pigs.

Lairs and Railway Cattle Docks.

Frequent visits have been made each week to the Lairs and Railway Cattle Docks in the Borough, as required by the Animals (Transit and General) Order of 1895.

The number of animals which arrived in the Borough by Rail during the past year is as follows:—

Cattle.	Sheep.	Pigs.	Calves.	Horses.
158,923	907,166	1,927	7,557	362

Unwholesome Food.

The amount of diseased and unsound food dealt with under the Public Health Acts, 1875 and 1890, during the year 1915, is summarised in the following tables:—

MONTH.	Total Number of Seizur's.	Beef.	Mutton.	Pork.	Veal.	Miscellaneous.					TOTALS
						Boiled Beef.	Yeast.	Chickens.	Geese.	Turkeys.	
		Weight in lbs.	Weight in lbs.	Weight in lbs.	Weight in lbs.	Weight in lbs.	Weight in lbs.	Weight in lbs.	Weight in lbs.	Weight in lbs.	
January	86	3,230	1,197	525	..	..	..	..	..	..	4,952
February	66	1,264	2,500	250	40	..	..	..	..	..	4,054
March	95	2,110	3,027	815	130	..	..	..	..	..	6,082
April	70	3,690	1,355	1,056	80	..	..	..	..	..	6,181
May	31	2,901	925	194	..	..	..	..	..	..	4,020
June	27	1,880	705	616	140	..	..	..	..	..	3,341
July	36	3,732	350	1,050	..	..	..	..	..	..	5,132
August	55	1,908	735	2,015	..	..	..	..	..	..	4,658
September	61	3,224	1,056	830	100	18	..	..	..	..	5,228
October	94	3,150	1,420	1,801	30	..	..	..	..	..	6,401
November	88	4,000	1,385	2,632	..	..	..	..	..	..	8,017
December	107	3,005	1,275	2,340	50	..	450	120	48	32	7,320
Total	816	34,094	15,930	14,124	570	18	450	120	48	32	65,386

Where Seized.	Seizur's.	Beef.	Mutton.	Pork.	Veal.	Boiled Beef.	Yeast.	Chickens.	Geese.	Turkeys.	Totals.
Public Slaughter-houses	474	30,790	15,930	548	570	..	..	..	..	..	47,838
Private ,,	329	3,174	..	13,509	..	..	..	..	..	..	16,683
Shops	1	..	..	15	..	..	..	..	..	..	15
Triperies	..	..	..	..	..	..	..	..	..	..	..
Railway Stations	5	..	..	..	..	..	450	120	48	32	650
Food Premises	7	130	..	52	..	18	..	..	..	..	200
Totals	816	34,094	15,930	14,124	570	18	450	120	48	32	65,386

In these tables the term "seizure" includes all cases where diseased or unsound food was discovered in the course of routine inspection and was surrendered by the owners thereof, and also where inspection was requested by the owners of diseased carcases, &c.

The total number of seizures therefore was 816, weighing 65,386 lbs., and this amount was condemned for the following causes:—

No. of Seizures.	Cause of Seizure.	Weight in lbs.
6	Pleurisy	58
4	Cirrhosis	67
8	Septicæmia	2,780
2	Abscess	167
1	Physiced	500
280	Tuberculosis	25,734
307	Asphyxiation	17,469
49	Swine Fever	755
43	Decomposition	5,501
17	Injured	3,552
4	Echinococcus	542
21	Dropsy	2,890
2	Hydatids	20
8	Congestion	618
2	Actinomycosis	90
1	Sarcoma	480
1	Peritonitis	320
1	Fluke Disease	30
4	Immature	160
1	Pneumonia	60
35	Parasitic	598
7	Emaciation	1,455
1	Pyæmia	200
4	Fevered	470
3	Oedema-Malignant	90
2	Necrosis	20
1	Metritis	600
1	Pericarditis	160
816		65,386

The large number of seizures for asphyxiation is accounted for by the fact that a considerable number of animals, chiefly sheep, die in transit, and these carcases are taken by the owners to the public slaughter-house at the Cattle Market.

During the latter part of the year, the wholesale grocery warehouses in the Borough were visited weekly, and all unsound, or doubtful tinned foodstuff was submitted for examination.

All unsound foodstuff was surrendered, and immediately removed from the premises and destroyed. Previously, the unsound food was stored on the premises, until a considerable quantity had accumulated, this was then packed up, and sent back to the shippers.

The storing of unsound food in this way was often a source of great nuisance to the public, and to the employees.

The following table shows the amount of foodstuffs surrendered by the occupiers of these warehouses :—

No. of Seizures.	Seizure.	Weight in Lbs.
11	Meat	120
69	Fish	314
45	Fruit	176½
4	Milk	28½
129		639

No. of Seizures.	Month.	Weight in Lbs.
19	September	208½
44	October	201
40	November......	124½
26	December	105
129		639

Tuberculosis in Cattle.

As will be seen from the foregoing tables, tuberculosis has been the disease most frequently dealt with.

The following table shows the number of seizures for this disease at the public slaughter-house, and the method of dealing with the same :—

	Total No. of Seizures.	Whole Carcase and Organs.	Part of Carcase and Organs.	Organs Only.
Cows	35	16	7	12
Heifers	6	2	3	1
Bullocks ..	5	3	..	2
Bulls	1	..	..	1
Total	47	21	10	16

During the past year a number of diseased animals have been sent out of the Cattle Market for the purpose of Clinical Examination, and in the majority of instances these animals were slaughtered. The number of animals dealt with was 38, the majority of these being Tuberculous animals, several others were affected with Johnes Disease, which causes chronic diarrhœa and emaciation, the remaining animals being emaciated due to parasitic conditions.

Slaughter-houses.

There are fifteen private slaughter-houses in the Borough, fourteen licensed and one registered. Four of the above are used solely for the slaughtering of pigs. It may be noted that the Health Committee refused to renew the licence of one slaughter-house, on the grounds that it did not comply with the Bye-laws.

Plans have been submitted and approved for the reconstruction of the registered slaughter-house, and it is expected that the work will be commenced in the Spring of **1916.**

The following table gives particulars of the visits and number of carcases inspected:—

MONTH.	No. of Visits.	Beef.	Mutton.	Pork.	Veal.	Horses.	Total.
January	88	69	98	323	16	..	506
February	91	154	148	421	17	..	740
March	126	134	132	329	7	..	602
April	131	99	82	437	4	..	622
May	105	87	93	198	3	..	381
June	92	152	175	148	..	..	475
July	99	32	144	178	1	..	355
August	94	49	330	121	..	..	500
September	100	42	277	165	..	..	484
October	118	51	251	446	30	..	778
November.....	146	56	331	819	18	7	1,231
December	141	102	380	1,096	4	8	1,590
Total	1,331	1,027	2,441	4,681	110	15	8,264

In addition to the private slaughter-houses there are three public slaughtering booths situated at the Cattle Market.

The following summary shows the number of animals slaughtered at these slaughter-houses during 1915:—

411 Cattle.
1,489 Sheep.
61 Calves.
69 Pigs.
15 Horses.

As will be seen from the foregoing table, a number of horses were slaughtered during the latter part of the year for human consumption.

These horses were carefully inspected before being removed from the slaughter-houses. Most of them were found to be young, deformed, or injured animals, but free from disease.

Cowkeepers.

There are now seven cowkeepers in the Borough, with accommodation for about 194 cows. There is thus one shippon more than last year. During the year, an existing building was remodelled, and adapted for the accommodation of eight cows.

At the same time, another cowkeeper was prevailed upon to close a small shippon which accommodated four cows. This shippon was dark and badly ventilated. Eighty-five visits have been made to the shippons in the Borough and the cows carefully examined. Three cows affected with tuberculosis of the lungs were removed from the shippons, and slaughtered. No cases of tuberculosis of the udder were discovered.

Two cows died in the shippon. The second case was treated as anthrax, but microscopical examination of the blood did not reveal the presence of anthrax bacilli, and subsequent post-mortem examination of the carcase denoted that the cause of death was due to errors of feeding.

The cowkeeper was informed of this fact, and advised as to future feeding.

Tuberculous Milk.

During the year 1915, 206 samples of milk were submitted to Professor Delepine for examination for the presence of Tubercle Bacilli.

Of this number, 190 were samples of mixed milk obtained either at railway stations or from farmers' carts. Three samples of mixed milk were taken for the purpose of controlling work, and thirteen were samples taken from suspected cows during the inspection of the farms. The 190 samples of mixed milk may be divided into the following classes: 162 were consigned to registered dairymen in the Borough; 22 were consigned to registered dairymen outside the Borough, but retailing in the Borough; and the remaining six were samples of milk obtained at farms situated in the districts immediately adjoining this Borough and intended for sale in the Borough.

Out of the 190 samples of mixed milks submitted, ten were reported as having been found to cause tuberculosis, this being a percentage of 5·26, and it is interesting to note the varying degree of tubercular contamination in the samples as above classified:—

		Tuberculous.	Non-Tuberculous.	Percentage.
Dairymen in the Borough	162	9	153	5·5
Dairymen outside the Borough	22	1	21	4 5
Farms in the vicinity of the Borough	6	0	6	0
	190	10	180	5·26

Last year the highest percentage of tuberculous milk was obtained from farms in the immediate vicinity of the Borough, and it was pointed out that as several of them had been dealt with, and others advised as to the early symptoms of tuberculosis in the udder, an improvement might be expected. This expected improvement has taken place, showing that these farmers have either profited by their experience, or that of their neighbours.

There has been a slight reduction in the percentage of tuberculous milk supplied to the Borough, the figure being the lowest recorded for the last seven years.

It may be remarked, however, that since the outbreak of the war in 1914 the price of home-killed beef has considerably advanced, partly owing to the short supply of frozen beef. Farmers were thus given an opportunity to sell off their poorer cows at advanced prices. The reduction in the percentage of tuberculous milk supplied may therefore be attributed to economic conditions, and not to any lowering in the percentage of tuberculosis in cattle.

The percentage of tuberculous samples for the past six years is as follows :—

1910	1911	1912	1913	1914	1915
9·4	7·45	8·5	16·2	6·6	5·26

The ten samples of milk found to be tuberculous were all from different farms : five from farms in Cheshire, two in Lancashire, and one each in Derbyshire, Staffordshire, and Shropshire. The ten farms were all visited, and a total number of 331 cows inspected. Nine cows were found to be affected with Tuberculosis of the udder on eight of the farms. On the remaining two farms the diseased animals were not discovered.

In one case the farmer had disposed of cows between the taking of the mixed sample and the visit of the Veterinary Inspector. In the other case the farmer had not sold any cows, but on the date of the taking of the mixed sample he had several cows on his premises belonging to a cattle dealer. These were only on the premises for a week, from one market day to another, and these animals could not be traced. In both cases control samples of the mixed milk were submitted for examination, and were not found to cause tuberculosis, thus showing that the diseased animals had not been overlooked. Eight of the discovered animals were slaughtered by the owners, and post-mortem examinations made. The remaining cow was removed off the farm by the owner, and no further history has been obtained.

Of the nine diseased animals discovered, seven were found to be giving milk containing tubercle bacilli sufficiently numerous to be recognised microscopically ; three of the tuberculous cows were under seven years of age, the other six being aged animals.

It may be remarked that all the animals slaughtered proved to be tubercular on post-mortem examination.

Premises where Food is Prepared.

Careful inspection of premises where foodstuffs are prepared has been maintained during the year.

Several of the premises used for this purpose are not structurally suitable, but owing to the high price of building materials and the shortage of labour alterations to these premises have been postponed.

Owing to the vigorous inspection of previous years, an improvement in the quality of meat, &c., used has been effected, with the result that few seizures have been made.

Many of the occupiers and workmen now recognise the early signs of decomposition and disease, and refuse to receive doubtful meat on to their premises.

SECTION V.

BOROUGH ANALYST'S REPORT.

TO THE HEALTH COMMITTEE.

GENTLEMEN,

I have the honour to present my Annual Report on the work carried out in the Borough Laboratories during the year 1915.

During the year, 1,256 samples have been submitted to me for analysis. Of these, 1,174 were taken in connection with the Sale of Food and Drugs Acts, nine were taken in connection with the Milk and Cream Regulations, 1912, twenty-nine were samples sent in by various Corporation departments, whilst forty-four were samples of milk for special examination for dirt.

Of the 1,174 samples taken under the Sale of Food and Drugs Acts, thirty-three, or 2·8 per cent., were adulterated. This is somewhat higher than the percentage for 1914 owing to increases in the amount of adulteration of milk and butter, but the matter is not so serious as it may appear at first sight. A great improvement has taken place in the quality of the drugs.

I have the honour to be, Gentlemen,

Your obedient servant,

G. D. ELSDON,

Borough Analyst.

Municipal Laboratories,
141, Regent Road, Salford,
February 8th, 1916.

SALFORD BOROUGH ANALYST'S REPORT.

1. Samples under the Sale of Food and Drugs Act.

The total number of Foods and Drugs examined during the year was 1,174, of which one was sent in by a private trader in the Borough. The following tables give complete details concerning the various articles examined :—

Samples.	Total Number Examined.	Number Adulterated.		Percentage of Adulteration.
		Preservatives only.	Other Ways.	
Milk	435	1	20	4·8
Butter	229	4	4	3·5
Cheese	155	..	..	..
Lard	68	..	..	..
Margarine	21	..	1	4·8
Flour	29	..	..	..
Self-raising Flour	18	..	..	..
Bread	18	..	..	..
Sago	32	..	1	3·1
Tapioca	5	..	..	..
Rice	40	..	..	..
Pearl Barley	18	..	..	..
Ground Rice	2	..	..	..
Sugar	35	..	..	..
Coffee	1	..	..	..
Malt Vinegar	1	..	..	..
Pepper	3	..	..	..
Ground Ginger	1	..	..	..
Tea	3	..	..	..
Jam	3	..	..	..
Chocolate	2	..	..	..
Cocoa	1	..	..	..
Prescriptions	10	..	1	10
Zinc Ointment	7	..	..	..
Ammoniated Tincture of Quinine	7	..	..	..
Boric Ointment	6	..	..	..
Tincture of Iodine	6	..	1	17
Castor Oil	5	..	..	..
Fluid Magnesia	3	..	..	..
Lime Water	3	..	..	..
Glycerin	3	..	..	..
Cod Liver Oil Emulsion	2	..	..	..
Solution of Ferric Acetate	1	..	..	..
Camphorated Oil	1	..	..	..
TOTAL	1174	5	28	2·8

The samples may be divided into two sections: "Formal" and "Informal" samples. "Formal" samples are those which are taken in accordance with Section 14 of the Sale of Food and Drugs Act, 1875, which reads as follows:—

"The person purchasing any article with the intention of submitting the same for analysis shall . . . . forthwith notify to the seller . . . . his intention to have the same analysed by the Public Analyst, and shall divide the article into three parts . . . . and shall deliver one of the parts to the seller."

"Informal" samples are those in connection with which the formalities of the Act are not complied with, and in general the seller has no knowledge that the taking of the sample is for official purposes. No legal action under the Sale of Food and Drugs Act can follow the taking of an "Informal" sample.

The taking of "Informal" samples is a valuable method of enquiry into the food supply of the Borough, and for finding out at what shops it would be profitable to take "Formal" samples with a view to legal proceedings. The time and trouble required for the taking of an "Informal" sample are much less than those required for the taking of a "Formal" sample, and no annoyance is caused to honest shopkeepers, whose chief objections to the taking of samples are that the Inspector takes up their time and counter space for the division of samples, while his action excites curiosity on the part of the customers.

A memorandum sent out by the Local Government Board in December, 1914, contained the following words:

"The Board understand that, with a view to preliminary investigation, 'Informal' samples have been collected in some districts for examination, by rough sorting methods only, by the Public Analyst or by some other person." This and similar statements have given rise in some quarters to the idea that "Informal" samples need less care and trouble bestowed upon them than "Formal" samples. The phrase "by rough sorting methods" may, of course, be variously interpreted, but it is now a generally acknowledged fact that the days of empirical sorting tests are over, and that the advent of the scientific food faker has made it necessary for Analysts to study carefully all samples submitted to them. The results obtained "by rough sorting methods . . . . by some other person" may actually do harm by indicating purity where it does not exist.

In this laboratory, and in fact in all public laboratories of which the writer has any knowledge, as much time and care are bestowed upon "Informal" as upon "Formal" samples; indeed it may happen that, where some particularly ingenious adulteration has been practised, practically all the investigation is done on the "Informal" sample when, with the knowledge so gained, the analysis of a subsequent "Formal" sample of similar composition will be a comparatively simple matter.

The number of samples found to be adulterated was thirty-three, or 2·8 per cent. This figure is slightly higher than the corresponding one for last year, being due chiefly to an increase in the percentage of milk adulteration from 3·1 to 4·8, and an increase in the percentage of butter adulteration from 0·0 to 3·5; these are, however, balanced to some extent by a great improvement in the quality of the drugs supplied, the percentage of adulteration having fallen from 28·2 to 3·7. In the following table are given comparative figures of the adulteration for the last five years, together with such similar figures as are available for other towns taken from the Local Government Board returns. I am allowed to print the remainder by the courtesy of the Public Analysts of the places mentioned.

TABLE 2.—PERCENTAGE OF ADULTERATION, 1911–1915.

	1911	1912	1913	1914	1915	Qrs. of Year 1915.			
						1st	2nd	3rd	4th
Salford	2·5	1·8	1·6	2·4	2·8	3·8	3·0	2·6	1·8
England and Wales	8·7	8·4	7·6	*	*	*	*	*	*
Metropolitan Boroughs	8·5	8·8	9·5	*	*	*	*	*	*
Manchester	2·1	2·2	*	*	*	*	*	*	*
Birmingham	9·5	7·9	6·3	7·2	6·6	*	*	*	*
Bristol	6·5	8·9	8·2	7·2	*	*	*	*	*
Liverpool	12·2	11·4	10·1	10·3	8·3	*	*	*	*

* Not yet available.

Table 3 gives the number of samples taken under the Sale of Food and Drugs Acts for each 100,000 persons living in Salford for the last five years, as compared with other towns in England and Wales.

TABLE 3.—NUMBER OF SAMPLES FOR 100,000 PERSONS.

	1910	1911	1912	1913	1914	1915
Salford	414	390	409	403	407	499
England and Wales	282	284	296	*	*	*
Manchester	468	422	426	*	*	*
Liverpool	320	298	335	400	404	391
Birmingham	400	408	410	466	464	455
Portsmouth	533	486	493	*	*	*
Hull	362	317	276	*	*	*
Metropolitan Boroughs	544	552	560	*	*	*

* Not yet available.

Table 4 contains the numbers of "Formal" and "Informal" samples respectively which have been taken during the last six years. The relative number of "Informal" samples tends to increase each year, on account of the reasons given on page 161, as well as the fact that they cost less to take.

TABLE 4.—NO. OF FORMAL AND INFORMAL SAMPLES.

	1910	1911	1912	1913	1914	1915
Formal	433	415	452	400	368	397
Informal	523	488	502	544	581	777

MILK.

Four hundred and thirty-five samples of milk were submitted for analysis, of which 21, or 4·8 per cent., were adulterated. Forty-four special samples of milk were also examined in connection with an investigation on the amount of dirt in milk. Particulars of the adulterated samples are given in Table 6, whilst the report on "dirt" will be found on page 166.

The average composition of the 435 samples of which a full analysis was made is given in Table 5 for each month and for each quarter.

This table is particularly interesting, as this is the first complete year for which such figures have been available. The results are, however, practically identical with those given in the report for the latter half of last year, namely—fat, 3·77 per cent., solids-not-fat, 8·81 per cent.; and they show that the highly satisfactory condition of the milk supply of the Borough, so far as composition is concerned, has been continued. They are additional evidence of the widespread opinion that the legal limit of 3·0 per cent. of fat is too low, and that it might be increased to 3·2 or 3·3 per cent., without hardship to farmers or retailers.

All these samples were tested for preservatives with (except in regard to one sample, of which particulars are given on page 162) negative results.

TABLE 5.—AVERAGE COMPOSITION OF MILK, 1915.

Month.	Number of Samples.	Total Solids per cent.		Fat per cent.		Solids-not-fat per cent.	
January	42	12·50	12·53	3·73	3·77	8·77	8·76
February	25		12·21		3·49		8·72
March	49		12·62		3·81		8·81
April	44	12·61	12·78	3·77	3·99	8·84	8·79
May	31		12·59		3·73		8·86
June	48		12·48		3·61		8·87
July	24	12·69	12·40	3·77	3·66	8·92	8·74
August	31		12·70		3·80		8·90
September	44		12·79		3·79		9·00
October	38	12·70	12·62	3·88	3·72	8·82	8·90
November	26		13·30		4·40		8·90
December	33		12·32		3·66		8·66
TOTAL	435		12·62		3·78		8·84

Forty-five samples were taken at Ladywell Sanatorium. These are supplied under a contract, the terms of which are:—"Milk containing not less than 3·5 per cent. of fat." Five of the samples contained slightly less fat than this, but in all cases the average of each delivery has always been well over 3·5, except in the case of two churns delivered on December 22nd. These two churns contained 3·1 and 3·2 per cent. of fat respectively; the attention of the contractor has been called to this matter, and the case is being followed up.

The number of samples containing artificial colouring matter has been somewhat less during 1915 than during the preceding year, but artificially coloured milks are still far too prevalent. The public should realise that genuine milk is usually almost white, or at most has only a pale yellow colour, and that any deep colour is not due to great richness, but that it has been deliberately added by the vendor with a view to giving it an artificial appearance of richness. Natural milk is usually of a somewhat deeper colour in May, June, and July, when the cows are at grass. Some vendors protest that they only continue the practice because the public has become so used to artificially coloured milk that they are suspicious of the pure product, but it should be an easy matter to inform their customers of the true state of affairs.

The practice of colouring milk is objectionable, on the grounds, firstly, because a foreign body is added, which can be of no value, even if it does not do actual harm; secondly, because it enables dishonest milk dealers to give an artificial appearance of richness to a poor or adulterated milk.

Full particulars of those samples of milk which were found to be adulterated are given in Table 6.

It will be seen that although the number of adulterated samples is greater than last year, yet the amount of really serious adulteration is still low, and that almost all of the really bad samples were adulterated before they came into the Borough.

TABLE 6.—ADULTERATED SAMPLES OF MILK.

No. of Sample	Nature of Adulteration.	Action taken.	Remarks.
3273	Deficient of 3½% of solids-not-fat.	Caution	
3279	Deficient of 21% of solids-not-fat and 16% of fat.	Caution	Same vendor. Farmer supplying adulterated milk.
3282	Deficient of 14% of solids-not-fat and 16% of fat.	Caution	
3294	Deficient of 4½% of solids-not-fat	Caution.	
3374	Deficient of 23% of fat	Fine 20s. and 3s. costs.	
3388	Deficient of 13% of fat	Caution	See 3407 and 3410.
3407	Deficient of 6½% of fat	Farmer supplying 3388.	Informal sample.
3410	Deficient of 26% of fat	Fined 10s., including costs.	Same farmer as 3407.
3443	Deficient of 5½% of solids-not-fat	Caution	Farmer supplying adulterated milk.
3558	Deficient of 3½% of solids-not-fat	Caution.	
3575	Contained 10 grains boric acid per gallon.	Caution.	
3598	Deficient of 4½% of solids-not-fat	Caution.	
3704	Deficient of 3% of fat	Caution.	
3751	Deficient of 16% of fat and 1% solids-not-fat.	Summons withdrawn	
3812	Deficient of 10% of fat	Fined £1, including costs.	
3843	Deficient of 20% of fat	Fined £1, including costs.	
4105	Deficient of 20% of fat	Fined 5s., including costs.	
4196	Deficient of 3½% of solids-not-fat	Caution.	
4343	Deficient of 9% of solids-not-fat		See 4380.
4380	Deficient of 4½% of solids-not-fat	Farmer's samples adulterated.	Wholesaler supplying 4343.
4389	Deficient of 4½% of solids-not-fat	Caution.	

Samples 3279 and 3282 were seriously adulterated, and were obtained from one vendor; the adulteration was traced to the farmer. As the samples were delivered at a Manchester Station, your Inspector was not able to take samples himself, so the case was transferred to Manchester, where the farmer was successfully prosecuted, and fined £10 and £3 costs. The Salford vendor was cautioned as to his legal liability.

Sample number 3388 was taken at a small shop, and was found to be deficient in fat to the extent of 13 per cent.; an informal sample (No. 3407) from the farmer supplying this shop was found to be deficient of 6½ per cent. of fat. A formal sample (No. 3410) was taken of the farm milk on delivery, and this was found to be deficient of 26 per cent. of fat. The farmer explained to the Court that his men were in the habit of removing the top layer from a churn which had been standing all night, for their own use; he was fined 10s., including costs.

Sample No. 3443 was bought at a small shop; it was found to be deficient of 5½ per cent. of solids-not-fat. The adulteration was traced through the wholesale dealer to the farmer. The farm samples could not be taken by your Inspector, as they were delivered at one of the Manchester Stations; proceedings were, however, instituted by the Manchester authorities, and eventually the farmer was fined £3, including costs.

Sample 3751 was deficient of 16 per cent. of fat and 1 per cent. of solids-not-fat. The summons against this dealer was withdrawn on an undertaking being given that she would give up the sale of milk.

Samples 3812, 3843, and 4105 were deficient of fat to the extent of 10 per cent., 20 per cent., and 20 per cent., respectively. They were brought from three separate shops. In each case the wholesale dealer supplying the shop was found to be delivering genuine milk. Fines of £1 were inflicted in the two former cases, and a fine of 5s. in the last.

Samples 4343 and 4380 were from a shop, and the wholesale dealer supplying the shop respectively. The adulteration was traced to the farmer supplying the wholesale dealer. He was prosecuted by the Manchester authorities and fined.

In Table 7 comparative figures are given for milk adulteration for 1910 to 1914.

TABLE 7.—MILK ADULTERATION 1910-1914.

	1910.	1911.	1912.	1913.	1914.
Salford	2·2	2·5	1·8	1·6	2·4
Manchester	4·9	4·6	4·6	*	*
Liverpool	19·1	21·7	19·3	16·2	17·6
Birmingham	13·5	9·3	8·2	8·2	9·0
Metropolitan Boroughs .	9·9	11·2	9·3	8·7	*
England and Wales ...	11·1	11·9	10·9	9·5	*

* Not available.

DIRT IN MILK.

In addition to the forty-four special samples of milk, 346 of the samples taken under the Food and Drugs Acts were examined for the amount of "dirt" they contained, making a total of 390 samples examined in this way.

The method used has been that suggested by Lowe (*Chemical News*, 1912, *106*, 61). A quantity of milk, which should not usually be less than 500 cc., is allowed to stand for twelve hours in a cylinder, the bottom end of which is drawn out, and fitted with a tube graduated in 0·01 cc. The volume of sediment can then be read off directly, and when multiplied by two will give the parts per 100,000 by volume of sediment in the milk. All the following results are expressed in this way.

Of the 390 samples examined, 56 did not give any measurable amount of sediment, 167 gave sediments of 0·5 per 100,000, 62 gave 1·0 parts per 100,000, 29 gave 1·5, 32 gave 2·0, 20 gave 3·0, 14 gave 4·0, 6 gave 5·0, 3 gave 6·0, and 1 gave 7·0. These figures are given in Table 8:—

TABLE 8.—DIRT IN MILK.

Dirt. Parts per 100,000	No. of Samples.	Percentage of whole.
0·0	56	14·4
0·5	167	42·8
1·0	62	15·9
1·5	29	7·4
2·0	32	8·2
3·0	20	5·1
4·0	14	3·6
5·0	6	1·5
6·0	3	0·8
7·0	1	0·3

One of the most interesting features in connection with the investigation has been the improvement which has taken place during the year. Of the forty-four samples which gave more than two parts of sediment, twenty-eight, or 63·7 per cent., were taken in the first three months of the year. It seems quite likely that this improvement is due to the fact that the milk vendors, when they knew that samples were being taken, took more care over the handling of their supplies.

From the figures thus obtained it will be seen that 73 per cent. of the samples contain one part per 100,000, or less, of sediment. Leaving for the time being the question as to whether milk should contain any sediment at all, it is quite obvious from these figures that it ought not to contain more than one part per 100,000, and that samples containing much more than this have been carelessly handled. In many parts of the country convictions have been obtained, and in some cases really heavy penalties enforced, for quantities in excess of this. There is no doubt but that with reasonable care the milk supply should be absolutely free from sediment of any kind, and that therefore those vendors who supply dirty milk should have pressure brought to bear upon them with a view to improving their methods.

The question of a clean milk supply is intimately connected with public health. A large portion of the sediment usually found is cow dung, and it needs no elaborate arguments to show that milk containing quantities of cow dung is not an ideal food for infants and young children—more especially in hot weather.

Although the Salford milk supply is fairly satisfactory in this respect, there is still considerable room for improvement, and we are still a long way from those ideal conditions in which all the milk examined will be found to be free from sediment.

BUTTER, MARGARINE.

Two hundred and twenty-nine samples of butter have been examined, of which one was from a private trader in the Borough. Of these eight, or 3·5 per cent., have been adulterated.

An informal sample (No. 3182) contained 26·0 per cent. of water. It was wrapped in paper on which was printed the following words: "Irish Salt Firkin Butter, containing about 18 to 24 per cent. of water." Subsequent samples labelled in the same way contained considerably less than 24 per cent. of water. The Board of Agriculture was approached on the matter, and they replied: "If the article in question is Irish Salt Firkin Butter, and contains about 18 to 24 per cent. of water, as stated on the wrapper, no offence would seem to be committed under the Sale of Food and Drugs Acts." No further action was taken.

Four informal samples (Nos. 4040, 4041, 4044, and 4060) contained respectively 0·8, 0·8, 0·8, and 0·7 per cent. of boric acid, which figures are greater than the limit (0·5 per cent.) suggested by the Departmental Committee on Preservatives in Food. These four samples were traced to one wholesale dealer, and a sample from him (No. 4141) contained 0·65 per cent. of boric acid and 18·5 per cent. of water. The wholesale dealer stated that he bought the butter from Cork. The matter was reported to the Board of Agriculture, who are investigating it.

An informal sample (No. 3778) was found to consist entirely of margarine. A subsequent formal sample from the same shop also consisted of margarine. The vendor was prosecuted, and a fine of £3, including costs, was imposed.

Each sample has been tested for preservatives, and a boron preservative has been found in fifty cases. The Local Government Board requires that the actual amount of preservative shall be determined in each case. The results are given in the following table, the boron preservative being expressed as boric acid:—

TABLE 8.—BORIC ACID IN BUTTER.

Amount.	Number of Samples.	Per cent. of whole.
Over 0·5%	5	2·2
0·41—0·5%	2	0·9
0·31—0·4%	5	2·2
0·21—0·3%	7	3·1
0·11—0·2%	10	4·3
0·01—0·1%	20	8·7
Absent	180	78·6

Twenty-one samples of margarine have been examined at considerable length. Only one has been returned as adulterated, which is equivalent to 4·8 per cent. Owing to the abnormally high price of butter during the year the sale of margarine has very largely increased, in fact to such an extent that many of the smaller shops have given up the sale of butter entirely. It was thought advisable therefore to make a careful enquiry into the margarine at present being sold. One of the most remarkable features has been the tremendous increase in the number of "branded" margarines now on the market, the sale of many of which has now reached enormous proportions.

It may be interesting and useful to give a short account of the preparation of margarine and of its composition.

The first butter substitute was made in Paris in 1870, owing to the enormously high price of butter. It was the result of experiments made by a Frenchman, Mège-Mouriès, induced by a prize offered by the French Government. For many years margarine was made from animal fats by some such method as the following :—The fat of the animal was allowed to cool and set, often by artificial means ; it was then heated until most of the fat had drained away from the tissues, and the fat so obtained was put into presses at a temperature of about 100 deg. Fah. In this way the fat was divided into "stearine," which was used for the manufacture of candles, and "oleo-oil," which was the basis of the margarine. The "oleo-oil" thus prepared was run into an emulsifier at a suitable temperature, iced milk was run into it, and the whole thoroughly churned. The whole was then flavoured with salt, suitably coloured, and a little boric acid added to act as a preservative.

Although this is the basis of modern methods now used for the manufacture of margarine, yet many alterations and improvements have been introduced. A large amount of beef fat is still used in the manufacture of the higher-priced margarines, but vegetable oils are now used for the cheaper brands. The vegetable oils that are used are coconut oil and palm kernel oil, with varying proportions of cotton seed oil, sesamé oil, arachis oil, and other similar products. Beef fat is mixed with that of the sheep and pig.

The popular prejudice which existed for some time against the use of margarine was doubtless due to the carelessness which used to exist in its manufacture, and the unpalatable flavour of the resulting product. All this is now happily a thing of the past. To ensure success the manufacture of margarine has to be carried out under conditions of the most scrupulous cleanliness, and the fats used must be fresh and free from all unpleasant flavour, the result being that the final product of all reliable firms is both wholesome and nutritious. It is now a well-known fact that there is hardly any difference between the nutritive properties of butter and margarine, and that many persons are not able to distinguish by taste between the two.

The main legal requirements in connection with the sale of margarine are: that it shall be sold in a wrapper on which the word margarine is printed in capital block letters not less than half-an-inch long, and distinctly legible; that it shall not contain more than 16 per cent. of water, and the fat shall not contain more than 10 per cent. of butter fat.

The Departmental Committee on Preservatives in Food recommended that the only preservatives allowed to be used should be borax or boric acid in amounts not exceeding 0·5 per cent.

The only sample of margarine which was adulterated contained 17 per cent. of water. The vendor was cautioned, and subsequent samples were found to be genuine. The other samples, all of which were passed as being satisfactory, included representatives of all the better-known brands. Butter fat was absent (or practically so) in all cases but one, when seven per cent. was present.

CHEESE, LARD.

One hundred and fifty-five samples of cheese have been examined, and all have been passed as genuine. The fat has, in each case, been pure milk fat.

The percentage of fat in most of the samples has been found to be satisfactory, but seventeen of the samples have contained 15 per cent. or less, whilst two of the samples contained only 5 per cent and 7·5 per cent., respectively. This low amount of fat indicates that the cheese has been prepared from skimmed or separated milk, but in the absence of a standard for fat in cheese such samples have to be passed as genuine unless bought as some particular variety, such as "Cheshire," which ought to be prepared from full cream milk. It is understood that the Board of Agriculture have got this question of a fat standard for cheese under consideration.

The sixty-eight samples of lard have all been passed as genuine. They were free from water and rancidity. No foreign fat was detected in any case. In accordance with the wishes of the Local Government Board, as set out in their circular of May, 1910, special search has been made for the presence of paraffin. None has been detected.

CEREAL FOODS.

Twenty-nine samples of flour and eighteen samples of self-raising flour have been examined and passed as genuine. In the case of some of the samples the presence of minute quantities of nitrites was established, this being evidence that the flour had been subjected to a bleaching process with nitrogen peroxide. Reports on the bleaching of flour were made to the Local Government Board in April, 1911, and in October, 1912, but the state of our present knowledge, coupled with the lack of standards, makes action somewhat difficult. There is not much doubt, however, but that the sale of bleached flour should not be permitted except under distinct regulations as to labelling. There seems to be a certain amount of evidence to show that the ingestion of bleached flour is actually injurious, and there is also the point that, by bleaching, a flour of poor colour, and therefore low price, may be made to look equal to the better qualities and command an equally high price.

A special search has been made for the presence of sulphates in flour. In some cases acid calcium phosphate (" super-phosphate ") is added to " improve " the flour, and calcium sulphate (commercially known as plaster of paris or gypsum) is usually present in this as an impurity. The presence of acid calcium phosphate in flour would, of course, constitute adulteration. None of the samples examined have contained this substance. In self-raising flours acid calcium phosphate is now often used as a self-raising ingredient, and in a report to the Local Government Board in 1911, Dr. Hamill recommended that where acid calcium phosphate is used as an ingredient of self-raising flour and baking powders it should not contain more than 10 per cent. of calcium sulphate. This seems to be a very lenient standard, as it is quite possible to prepare an article containing 1 per cent. of calcium sulphate, but of course the cost of these pure samples is greater. It seems only reasonable, however, to require that, where it is considered necessary to add a foreign substance to such a universally-used article as flour, only the better qualities of such a substance shall be used.

Eleven of the eighteen samples of self-raising flour contained acid calcium phosphate as one of the self-raising ingredients. In most cases the amount of sulphate found was quite trivial, whilst in all cases it was considerably under the suggested standard of 10 per cent.

In order to detect the presence of added sulphates it is obviously necessary to know what percentage of sulphates is natural to flour. The estimation of sulphates used to be done on the ash, but it has been shown by various authors that this is worthless (cf. *Analyst*, 1914, *39*, 425, 429; 1915, *40*, 142), and various methods have been suggested for getting over the difficulty. A considerable amount of work has been done by the writer, but the average amount of sulphate found (0·025 per cent. calculated as calcium sulphate) is higher than that found by Cripps and Wright (*Analyst*, 1914, *39*, 429), *e.g.*, 0·014 per cent. This difference may be due to the different methods of extraction (with hydrochloric acid and acetic acid respectively), and further work is being done with the object of settling this point.

Of the forty samples of rice examined, ten, or 25 per cent., contained mineral facing. The amount of such mineral facing was found to vary from 0·18 per cent. to 0·48 per cent. The two samples of ground rice were free from mineral facing.

Thirty-two samples of sago and five of tapioca were found to be free from mineral facing, and added mineral matter—the ash varying from 0·05 to 0·14 per cent. One sample, however (No. 3679), contained 19 per cent. of pearl barley and 2 per cent. of rice. The retailer stated that it was sold in exactly the same condition as it was supplied by the wholesaler, and, as the matter was obviously only due to carelessness in packing, the latter was cautioned.

The eighteen samples of pearl barley have all been free from mineral facing, and from excess of mineral matter. The ash has varied from 0·80—1·17 per cent.

The facing of cereals has been under consideration for some time now, a report having been made on rice to the Local Government Board in 1909. The following words occur in that report: "From what has been said of the practices of English and some Continental millers, an outside limit of not more than 0·5 per cent of mineral matter would seem amply to meet the requirements of traders who represent this practice as necessary."

Unfortunately, this has been accepted in some quarters as a statement that rice may legally be coated to the extent of 0·5 per cent. As a matter of fact, it is nothing of the kind, and some Analysts are in the habit of calling adulterated all those samples of rice which are coated. Unfortunately the practice is extending to the other cereals, and recently many samples of pearl barley have been returned as adulterated in other towns. It is submitted by millers that the coating of such substances is necessary in order to stay the ravages of weevils, but doubt has been cast on this by the United States Department of Agriculture, and by Hefelmann, whilst, so far as pearl barley is concerned, Liverseege and Hawley have shown that not only does facing fail to protect the grains, but, in the samples they examined, actually seems to make matters worse.

The eighteen samples of bread examined were free from mineral additions and did not contain an excessive amount of moisture.

Miscellaneous Foods.

The single sample of malt vinegar contained 4·0 per cent. of acetic acid, and gave analytical figures suggesting that it had been prepared from grain, the starch of which had been saccharified by the diastase of malt; it was thus in accordance with the standards suggested by the Local Government Board in 1913.

The thirty-five samples of sugar were genuine, as also were the samples of coffee, the one sample of cocoa, the two samples of chocolate, and the one sample of ground ginger.

The total ash of the three samples of pepper varied from 1·18 to 1·36 per cent., practically all of which was soluble in hydrochloric acid. The microscopic appearance was in all cases normal.

The total ash of the three samples of tea varied from 5·44 to 5·56 per cent., whilst the ash soluble in water varied from 3·44 to 3·54 per cent.

The three samples of jam consisted of one sample of strawberry and two samples of black currant. They were all free from preservatives, artificial colouring, and apple pulp.

DRUGS.

Fifty-four samples of drugs were examined, and two, or 3·7 per cent., were found to be adulterated. This proportion is considerably lower than that for last year, when 28 per cent. of the thirty-nine samples were found to be adulterated. It must be remembered, however, that the high figure for last year was almost entirely due to the shortcomings of one substance, ferric acetate.

Ten of these samples were mixtures which had been dispensed to prescriptions. Four of these contained quinine, three contained sodium salicylate, two contained bismuth carbonate and one contained potassium iodide. All were found to be correctly dispensed except the latter (No. 3396). In this case the prescription ordered 2 drachms of potassium iodide in eight ounces of water; there was actually present only 1·3 drachms, a deficiency of thirty-five per cent. The pharmacist who dispensed this mixture has been cautioned by the Health Committee and by the Insurance Committee, and the matter has also been reported to the Pharmacists' Association.

Zinc ointment is required by the British Pharmacopœia to contain fifteen per cent. of zinc oxide and to be made with a basis of benzoated lard. The seven samples examined were satisfactory in both respects.

Seven samples of ammoniated tincture of quinine were examined, and all were satisfactory as regards the content of quinine sulphate and alcohol, but three were somewhat deficient in ammonia. As, however, the deficiency was not serious, and this preparation is frequently not of full strength in this direction, the samples were passed as genuine. It might be well, however, for pharmacists to pay attention to the storing of ammoniated tincture of quinine, as any serious deficiency in ammonia would have to be looked upon as adulteration.

The six samples of boric ointment all closely complied with the Pharmacopœal requirements of ten per cent. of boric acid and were all passed as genuine.

Tincture of iodine (weak) of the British Pharmacopœia should contain 2·5 grams of potassium iodide and 2·5 grams of iodine per 100 cubic centimetres of tincture. Five of the six samples examined were sufficiently near this standard to be passed as genuine. The sixth sample, however (No. 3709), contained 2·46 per cent. of potassium iodide and only 2·2 per cent. of iodine, a deficiency in iodine of 12 per cent. This sample was taken from the bottom of a stock bottle which was practically empty. Iodine is a volatile substance, and possibly the deficiency was due to loss of iodine owing to careless storage; the vendor was cautioned to be more careful in future.

The five samples of castor oil and the three samples of glycerine complied with the requirements of the British Pharmacopœia and were passed as genuine.

The three samples of fluid magnesia contained respectively 0·96, 0·80, and 0·90 grams of magnesium oxide, all of which are within the requirement of the British Pharmacopœia.

The three samples of lime water contained respectively 0·12, 0·12, and 0·13 per cent. of calcium oxide and were passed as genuine. All the samples were clear and free from carbonate.

The two samples of cod liver oil emulsion contained respectively forty-two and forty-one per cent. of cod liver oil and were genuine in other respects.

The single sample of solution of ferric acetate was obtained early in the year from a wholesale house. One of the pharmacists cautioned last year for selling an adulterated sample of this substance suggested that his sample was of the same strength as that supplied by this wholesale house. The sample supplied by the latter was found to be of satisfactory quality.

The single sample of camphorated oil contained 23·3 per cent. of camphor, and was prepared from pure olive oil; it was passed as genuine.

2. Samples under the Milk and Cream Regulations, 1912.

1. MILK AND CREAM NOT SOLD AS PRESERVED CREAM.

	(*a*) No. of samples examined for the presence of a preservative.	(*b*) No. in which a preservative was reported to be present.
Milk	435	1
Cream	3	3

The single sample of milk (No. 3575) found to contain a preservative contained boron preservative, equivalent to ten grains of boric acid per gallon. Such a small amount of preservative would exert very little effect on the keeping qualities of milk. The vendors were cautioned.

Cream No. 3624 contained fifty per cent. of fat and 0·2 per cent. of boric acid ; the vendor was cautioned.

Cream No. 3756 contained fifty-five per cent. of fat and 0·4 per cent. of boric acid ; the vendor was cautioned.

Cream No. 3758 contained sixty-two per cent. of fat, and 0·5 per cent. of boric acid. The vendor had been cautioned previously for the same offence, and a formal sample was taken with a view to legal proceedings being taken. The formal sample, however, was genuine, so the vendor was cautioned.

2. CREAM SOLD AS PRESERVED CREAM.

(*a*)—(1) Correct statements made	6
(2) Statements incorrect	0
Total	6

(*b*) Determinations made of milk fat in cream sold as preserved cream—

(1) Above 35 per cent.	6
(2) Below 35 per cent.	0
	6

(*c*) Nil.

(*d*) Nil.

3. THICKENING SUBSTANCES.

No evidence of the addition of any thickening substances was obtained.

4. REMARKS.

The amount of boric acid now found in cream seems to be considerably in excess of that formerly found, as five of the above samples contained 0·5 per cent. and two contained 0·4 per cent. The fat content of the above nine samples of cream and preserved cream has varied from forty-two per cent. to sixty-two per cent.

3.—Miscellaneous Samples.

Twenty-nine samples sent in by various Corporation Departments have been examined during the year.

Three samples of rock asphalt have been examined for the Borough Surveyor. They have had the following composition:—

Sample.	1	2	3
Bitumen	22	22	27
Other Organic Matter	1	1	1
Lime and Magnesia	53	51	46
Carbon dioxide, &c.	20	21	21
Sand	4	5	5

Two samples of formaldehyde have been received from the Health Department. They contained respectively 41 per cent. and 33 per cent. of formaldehyde, and were satisfactory in other respects. It is interesting to note that the former was the less expensive.

One sample of "Sweetened Australian Condensed Milk" was received from the Health Department; it had the following composition:—

Fat	9·6
Mineral Matter	2·0
Proteins	9·1
Lactose (Milk Sugar)	13·1
Sucrose (Cane Sugar)	42·0
Water	24·2
	100·0

The label stated that this milk, when diluted with one and three-quarter volumes of water, would have, except for the presence of cane sugar, the composition of an average full cream milk. This statement is borne out by the analysis.

Four samples of tinned "Brazilian stew" were received from the Borough Veterinary Surgeon. The contents were fresh and free from preservatives. They contained, however, quantities of tin, equivalent to about one grain per pound. Three of them were free from lead, but one contained about one-tenth of a grain of lead per pound.

Fourteen samples of tripe have been received from the Borough Veterinary Surgeon in connection with a complaint that much of the tripe sold in the Borough contained alkali. The alleged use of the alkali is to increase the amount of water which the tripe will hold, and therefore cheapen its production, as an increased weight of tripe will then be produced from the same weight of raw materials.

The samples of tripe received, some of which were supposed to be treated and others not, were all carefully examined for the presence of an alkali, but with practically negative results. Some of those samples which were supposed to have been treated certainly gave some evidence of traces of alkali, but in no case was it sufficient to be injurious to health, nor would it have excited suspicion under ordinary circumstances.

These latter samples, however, seemed to contain more water than those that were supposed to be untreated, but the evidence was not sufficient to warrant the taking of any action at the moment; the work is, however, being continued.

The other samples examined consisted of one milk, one sample of fat, one sample of water, and two samples of fruit cordial. These were all found to be of satisfactory quality.

SECTION VI.

CHILD WELFARE AND SUPERVISION OF MIDWIVES.

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CHILD WELFARE AND SUPERVISION OF MIDWIVES.

Infant Welfare Work had its inception in Salford when in 1893 a number of ladies were employed by the Ladies' Public Health Society to visit in the poorer districts. The attention of the visitors at that time was directed solely towards the sanitary conditions prevailing in the houses visited.

In 1900 it was noted that the outstanding feature of the vital statistics of the Borough for the preceding twenty years was an increase in the infant mortality, notwithstanding a decrease in the general mortality, and the Health Visitors, who from this time worked jointly for the Ladies' Public Health Society and the Corporation, were instructed to pay special attention to the feeding and care of infants. Systematic observation of the Greengate district, which had shown the highest infant mortality, resulted in a reduction of its infant death rate below that of the Borough as a whole.

It was therefore considered advisable to devote greater care to the infant population of all the districts visited, and from 1902 the staff of twelve Health Visitors devoted the whole of their time to the care of the infants. In

January, 1914, the staff of the Health Visitors was taken over and paid entirely by the Corporation. In connection with this work three Mothers' Guilds were established in the Borough by private philanthropy.

In July, 1915, the scope of the work was further extended in accordance with the scheme suggested by the Local Government Board, so as to provide for the observation of expectant mothers and of children up to school age. The Maternity and Child Welfare Centre was established in Regent Road, and a special staff was employed to devote its whole time to Maternity and Child Welfare work.

The staff consists of a Lady Medical Officer, seven lady Health Visitors, and a lady clerk. It is the duty of the Medical Officer to conduct all examinations of mothers and babies attending at the Centre and at the Guilds, and, in addition, to supervise the visiting and conduct the administrative work of the Department. Each Health Visitor is allotted a district, to the visiting of which most of her time is devoted, and a record is kept of all details connected with the sanitary state of the house and the health of its occupants.

In addition, the Health Visitors are instructed to assist in the work carried on at the various Mothers' Guilds.

The Work of the Health Visitors.

From July, 1915, when the work under the new scheme was begun, seven Wards have been visited by the Health Visitors, namely, Trafford, Ordsall, Charlestown, Islington, St. Thomas, Crescent, and Trinity. It has been the duty of the Health Visitor to visit all expectant mothers and children up to five years of age. Each Visitor has received notice of babies born in her ward weekly, and from the time the cases have left the hands of the Midwives (about the tenth day after confinement) she has become responsible for the visiting of the mother and baby.

At her first visit, the Health Visitor makes a careful inspection of the sanitary condition of the house, and any defects are reported to the Sanitary Inspector, or the tenant is urged to attend to them without delay.

The expectant mother is advised as to how best to care for herself and to prepare for her baby, and when the baby has arrived she is helped with the care and feeding of it. Special emphasis has been laid upon the practical side of the work ; where necessary, the mother is actually shown in her own home such simple processes as the sterilisation of milk, the cleansing of the bottle, the preparation of meals for older children, the dressing of the children's wounds, and even how to bath the baby. Thus she is taught to make the most of the resources at her command. A point which it has been found particularly necessary to urge upon the mothers has been the importance of regular meals to the growing child.

Where further advice on feeding or medical examination is needed, the parents are recommended to take the child to one of the Mothers' Guilds, where consultations are held weekly, or to the Child Welfare Centre.

The following table gives the number of visits paid by the Health Visitors in the various Wards, the number of expectant mothers and babies visited, and the sanitary conditions reported :—

TABLE C.W. 1.

(August 1st to December 31st, 1915.)

WARDS.	Total number of visits.	Number of babies visited.	Number of expectant mothers visited.	Houses dirty.	Houses lime-washed.
Trafford	1338	146	86	13	37
St. Thomas	1046	119	54	26	12
Crescent	1895	122	59	13	25
Islington	1510	131	36	27	14
Charlestown	1771	200	80	30	27
Trinity	2257	121	45	57	46
Ordsall	1209	160	65	22	142

Nine hundred and ninety-six visits have been made in Salford by the Visitor employed by the Manchester Jewish Ladies' Visiting Association.

The Mothers' Guilds.

There are three Mothers' Guilds in the Borough, namely, Haworth Hall, Rosamond Street, and John Street Hall Guilds. At each of these, owing to the generosity of private persons, expectant and nursing mothers are able to obtain dinners on every full working day of the week at a cost of a penny or twopence per meal. At each an afternoon is set apart for the weighing of babies under twelve months, and at Rosamond Street Guild a second afternoon is devoted to the weighing of children from one to five years old. All babies attending the weighing for the first time are medically examined, and, in addition, any babies who are not gaining satisfactorily or are ailing are examined and advice is given to the mother; expectant mothers who are in need of advice are also seen. When further examination or treatment is necessary than can be carried out at the Guild, the cases are transferred to the Maternity and Child Welfare Centre.

On other days practical classes and demonstrations are held in sewing, cookery, and the general hygiene of pregnancy and of the infant. The Health Visitor for the district in which the Guild is situated helps with the classes or cares for the babies, so that the mothers may enjoy the benefit of the lessons undisturbed.

The following figures show the number of attendances of babies on weighing days and the number of dinners served at the various Guilds during the year 1915:—

TABLE C.W. 2.

MOTHERS' GUILD.	No. of Children attending weighings.		Total No. of attendances at weighings.	No. of mothers attending for dinners.		Total No. of dinners served.
	Under 12 months.	Over 12 months.		Expectant	Nursing.	
Haworth Hall..	282	8	1406	267		13,735
Rosamond Street ..... (two afternoons)	298	77	2819	54	200	8,594
John Street ..	163	16	954	116	464	15,322

The Maternity and Child Welfare Centre.

The new Centre in Regent Road was opened at the end of October, its object being to provide a clinic at which expectant and other mothers could obtain medical advice for themselves and for their children from birth to school age, and thus to ensure that skilled attention shall be available for the child from the time of its conception to the time at which it is passed on to the care of the School Medical Officer. All cases encountered by the Health Visitors for which they considered medical examination to be desirable have been sent to this Centre, and others have been transferred from the Guilds.

Cases of acute illness discovered on the district or at the Centre have been recommended to the care of a private doctor or to a hospital for treatment. Treatment has been undertaken at the Centre only in those cases of chronic ailments of children which would no doubt otherwise have been neglected and which tend to diminish the resistance of the child to other more virulent diseases.

Table 3 shows the conditions for which 51 children were treated at the Centre in November and December :—

TABLE C.W. 3.

Diseases of the Respiratory System—	
Pharyngitis	7
Bronchitis	9
Diseases of the Alimentary Canal—	
Stomatitis	5
Dyspepsia	5
Persistent Vomiting	2
Diarrhœa	5
Chronic Enteritis	3
Constipation	8
Diseases of Special Systems—	
Conjunctivitis	1
Otorrhœa	2
Skin Diseases—	
Impetigo Eczema Seborrhœa, &c.	8

General—

Rickets		4
Malnutrition		4
Congenital Syphilis		1
Herniæ	Umbilical	6
	Inguinal	2

In all cases advice on the feeding of the child has been given; unless some definite contra-indication has existed, the mother has been urged to persist in the natural method of feeding for the first eight or nine months of the child's life. Test feeds were given in six cases and proved useful as an auxiliary guide to other methods of investigation.

Where breast-feeding has been impossible the mother has been directed as to the exact method of preparation of the most suitable diet, the directions being carefully written down for her reference. In addition, all cases attending at the Centre have been "followed up" in the homes by the Health Visitors, who have helped the patients to carry out the instructions given.

The following tables show the methods of feeding which were being employed in the cases of 201 children under one year, when first seen at the Centre or at the Guilds:—

TABLE C.W. 4.

Feeding of 201 Children under One Year on Registration.

	Under 1 month.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	Total.
Breast alone	40	33	20	16	9	118
Breast and other foods	5	8	8	8	5	34
Other foods entirely	1	14	15	12	7	49

TABLE C.W. 5.

Types of Food Being Given to 49 Children Under One Year and Entirely Artificially Fed on Registration.

FOOD.	Under 1 month.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	Total.
Cow's Milk alone	—	—	1	—	—	1
Cow's Milk and Water	—	4	3	3	2	12
Cow's Milk and Barley Water	1	—	4	—	1	6
Cow's Milk and Lime Water.	—	1	—	—	1	2
Cow's Milk and Boiled Bread	—	—	—	—	1	1
Condensed Milk (Nestlé's) ..	—	2	2	3	1	8
Condensed Milk and Barley Water	—	1	—	—	—	1
Dried Milk (Glaxo)	—	4	3	3	—	[illegible]
Barley Water and Virol ..	—	—	1	—	—	1
Foods—(Benger's, Neaves', Savory and Moore's)....	—	2	1	3	1	7

Day Nurseries, &c.

An important branch of Infant Care work in the Borough is that done by the Salford Free Kindergarten and Greengate Day Nursery, the object of both institutions being to provide a shelter for such children as would otherwise spend their days on the doorsteps and pavements of the slums.

The Salford Free Kindergarten is supported entirely by voluntary contributions. It is open from 9-30 a.m. to 3 p.m. every full working day of the week and admits children aged from 2½ to 5½ years. The average daily attendance during the past year has been 22.

These children are given a good dinner at a cost of one penny. They are taught simple, organised games, singing, &c., and are encouraged in the habits of order and cleanliness. From time to time the children are taken to the Rosamond Street Guild to be weighed. A nurse attends daily at the Kindergarten, and an Honorary Medical Advisor visits periodically.

The Greengate Day Nursery is supported partly by a grant from the Board of Education and partly by voluntary subscription. It provides accommodation daily from 7-30 a.m. to 6-30 p.m. for about 22 children of mothers who are obliged to go out to work. The children's ages range from one month to five years, the majority being from two to three years old. The Nursery is situated in the same building as the Greengate Dispensary, and the Doctors of this Institution kindly see any children who are ailing. All the children show the benefit of wholesome feeding at regular hours.

Midwives Act.

There are 58 midwives on the register in Salford; four are connected with public institutions, three are not practising, three others are maternity nursing—leaving 48 practising midwives, of whom 40 reside within the Borough.

PARTICULARS OF QUALIFICATIONS.

	Bona-fides.	St. Mary's Hospital.	London Obstetrical Society.	Central Midwives Board.	Total.
Practising Midwives	8	12	11	17	48
Non-practising Midwives..........	—	1	—	2	3
Maternity Nursing	2	—	1	—	3
Institution Nurses	1	—	1	2	4
Totals	11	13	13	21	58

The midwives are regularly visited, and their books, instruments, &c., inspected by the Lady Inspector, under the supervision of the Medical Officer, and the midwives are encouraged to consult with the Medical Officer when cases of difficulty arise. During the year three midwives removed from the district, one discontinued practising, three died, and one midwife was removed from the Roll. Eight midwives were newly registered. The total number of births during 1915 was 5,455; 4,133 of these, or 76 per cent, were attended by midwives, and 1,322, or 24 per cent, by medical practitioners. There were 23 cases of puerperal fever notified during the year, of which 17 occurred in the practice of midwives ; eight midwives had one case each, three had two cases, and one had three cases. These were thoroughly inquired into, and every care taken to prevent the spread of the disease.

Three midwives were reported to and censured by the Local Supervising Authority for neglecting to comply with the rules of the Central Midwives Board.

Seven midwives were suspended and disinfected on account of having been in contact with a notifiable infectious disease other than puerperal fever ; and two midwives having been in contact with non-notifiable infectious disease were instructed to take disinfecting baths at home.

Midwife No. 5027 was reported to the Central Midwives Board for neglect in connection with two cases of Ophthalmia Neonatorum and other breaches of the rules. Name struck off Roll.

The application of Midwife No. 8976, to the Central Midwives Board, for the restoration of her name to the Midwives Roll was not granted.

One thousand and seventy-one notifications of calling in medical practitioners have been received, the causes being the following :—

Abnormal Presentations	35
Deformed Pelvis	15
Antepartum Hæmorrhage	21
Placenta Prævia	5
Postpartum Hæmorrhage	29
Uterine Inertia	15
Obstructed labour, or requiring instrumental assistance	197
Retained Placenta or Membranes	35
Ruptured Perineum	176
Rise of Temperature	38
Eclampsia	4
Premature Birth	57
Miscarriage and Abortion	9
Inflammation of Eyes	164
Other causes relating to Mother	106
,, ,, ,, Child	165
Totals	1071

One hundred and twenty-four still-births and nine deaths of infants were notified by midwives during the year.

Ophthalmia Neonatorum.

During the year 1915 94 cases of Ophthalmia Neonatorum were notified, 61 of these being notified or re-notified by the Medical Staff of the Royal Eye Hospital.

Of the 94 cases notified—

79 occurred in the practice of midwives;
3 occurred in the practice of medical practitioners;
5 were attended by both doctor and midwife;
1 was notified from Hope Hospital;
4 were born in St. Mary's Hospital;
2 were born in Oldham and Seacombe respectively.

The cases are visited by the Inspector of Midwives, who also visits the cases of inflammation of the eyes notified under the Midwives Act.

Of the 93 cases visited two were prematurely born and died under one month, another died of pneumonia at the Royal Eye Hospital, two left the Borough, one child lost both eyes, and another child lost one eye; 77 cases recovered, whilst nine are still under observation.

The midwife responsible for the case which resulted in total blindness was reported to the Central Midwives Board and her name was taken off the Roll.

Six other midwives were warned *re* breaches of the rules under the Midwives Act in connection with Ophthalmia Neonatorum.

CLARA LOMAS-HARRIS, M.B., Ch.B.,
Medical Officer for Maternity and Child Welfare.

SECTION VII.

GENERAL WORK OF THE HEALTH DEPARTMENT.

SECTION VII.

GENERAL WORK OF THE HEALTH DEPARTMENT.

The staff of the Department consists of an Assistant Medical Officer, a Veterinary Surgeon, and 16 Inspectors, including two Lady Inspectors. There are also 7 Health Visitors. The Veterinary Inspector and 2 Sanitary Inspectors are on Active Service.

SYSTEMATIC INSPECTION AND ABATEMENT OF NUISANCES.—The systematic inspection of the Borough was conducted during the year 1915 on the same lines as in previous years. The result of the inspections may be gathered from a perusal of the " Register of Work Done," which is to be found at the end of this section of the report. It shows that the number of complaints received at the office of the Department was 3,427, as compared with 3,571 received in 1914, also that 19,467 dwelling-houses were inspected during the year. The details of each section of the work will be found under the special heading.

Housing of the Working Classes.

The action taken with regard to insanitary houses during the year has resulted in 48 of them being closed for human habitation either by compulsion or consent, 17 remodelled, and 32 demolished.

123 new houses have been erected.

Alteration of Privy Middens and Pail Closets to Water Closets.

This alteration, under the 1899 Salford Corporation Act, has been continued. During the year 170 pail closets have been altered to water closets, and the Corporation has contributed £2 per closet towards the cost of these alterations. 64 privy middens have also been converted to water closets entirely at the expense of the owners of the property. Since this work commenced, 21,680 privy middens and 6,367 pail closets have been converted or demolished.

Common Lodging Houses.

There were 25 Common Lodging Houses on the register at the end of the year, including the Model Lodging House in Bloom Street; five are in the Crescent Ward, eleven in Islington, one in Ordsall, one in St. Matthias', one in St. Paul's, three in St. Thomas', and three in Trinity Wards. These houses contain 184 rooms, with 1,181 beds. The average number of beds occupied per night was 858 beds for males and none for females. 1,014 inspections were made during the day time and 24 in the night time. Ten of these houses have been re-registered under Part V. of the Public Health Acts Amendment Act, 1907. Two houses have been transferred to new keepers, and one house has been discontinued.

These Lodging Houses have been kept in good and clean condition during the year, and the Bye-laws have been observed. There are some houses registered which are unsuitable for their purpose, but, unfortunately, so long as the keepers avoid offences against the Bye-laws there is no legal power to revise the Register. The Lodging House accommodation is ample for the needs of the Borough.

Houses Sub-let in Lodgings.

There are 258 houses let in apartments in the Borough; these contain 1,550 rooms. 34 houses were registered during the year and 28 were discontinued.

The houses referred to under this heading are those where the rent or charge payable by each lodger is less than 7s. per week, and if furnished, 10s. per week.

The registration of these houses gives us power to inspect them at any time. They have been inspected from time to time, and they have received 529 inspections in the day time and 12 inspections at night. One keeper and three tenants of rooms were prosecuted for contravening the Bye-laws, and fines amounting to £1 5s. were imposed, the fine being remitted in one case.

Seamen's Lodging Houses.

There are 14 Seamen's Lodging Houses in the Borough, containing 59 rooms and 136 beds; this is the same as last year. There have been 22 applications for renewals and new licenses; four of these have been refused, and two have been given up during the year, and one house struck off the Register. The Bye-laws in force regulating these houses have been carried out, and the houses generally kept in good and clean condition. 335 visits have been made during the day time and 50 visits during the night time.

Workshops.

At the end of the year there were 1,079 workshops on the register. These have been regularly inspected by the Lady Inspector of Workshops and by the District Inspectors, the Lady Inspector visiting those workshops where females are employed and the District Inspectors visiting those premises where males only are employed.

One hundred and two defects were found in the workshops, the particulars being given in Table B. The chief defects were defective and unsuitable sanitary accommodation and want of cleanliness, which were found in 21 cases and 30 cases respectively.

One workshop was found to be overcrowded, but this condition was remedied without the necessity of a notice being served.

In only one instance was the ventilation found to be defective.

Re OUTWORKERS.—The women outworkers' premises are visited by the Lady Inspector of Workshops, and those of the men by the District Inspectors.

During the year 487 visits have been paid.

The number of incorrect addresses sent to the Department during the year is very much below the number for previous years, and the inspection of Outworkers' premises has therefore been facilitated.

Factories, Workshops, Workplaces, and Homework.

A.—Inspection.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES DURING THE YEAR 1915.

Premises. (1)	Number of Inspections. (2)	Number of Written Notices. (3)	Number of Prosecutions. (4)
Factories (Including Factory Laundries)	43	13	..
Workshops (Including Workshop Laundries).	1,592	43	..
Workplaces (Other than Outworkers' premises included in Part 3 of this Report).	339	3	..
Total	1,974	59	..

B.—Defects Found.

Premises. (1)	Number of Defects. Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	Number of Prosecutions. (5)
Nuisances under the Public Health Act—*				
Want of cleanliness	30	30	..	..
Want of ventilation	1	1	..	..
Overcrowding	1	1	..	..
Want of drainage of floors	2	2	..	..
Other nuisances	3	3	..	..
Sanitary accommodation — insufficient	5	5	2	..
Sanitary accommodation — unsuitable or defective	21	22	1	..
Sanitary accommodation — not separate for sexes	5	3	..	..
Offences under the Factory and Workshop Act—				
Illegal occupation of underground bakehouse (s. 101)	1	1	..	..
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	33	30	..	..
Other offences (excluding offences relating to outwork which are included in Part 3 of this Report)	..	..	..	..
Total	102	98	3	..

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* Including those specified in sections 2, 3, 7, and 8 of the Factory and Workshop Act as remediable under the Public Health Acts.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.											Number of Inspections of Outworkers' premises.	OUTWORK IN UNWHOLESOME PREMISES, SECTION 108.			OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.		
	Lists received from Employers.						Number of Addresses of Outworkers received from other Authorities.	Number of Addresses of Outworkers forwarded to other Authorities.	Notices served on Occupiers as to keeping or sending lists.	Prosecutions.								
	Sending twice in the year.			Sending once in the year.														
	Lists.	Outworkers.		Lists.	Outworkers.					Failing to keep or permit inspection of lists.	Failing to send lists.		Instances.	Notices served.	Prosecutions.	Instances.	Orders made, S. 110.	Prosecutions, S.S. 109, 110.
		Contractors.	Workmen.		Contractors.	Workmen.												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Wearing Apparel—																		
1. Making, &c.	54	48	156	7	5	55	389	131	..	..	..	477	10	8	..	..	..	..
2. Cleaning and washing	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lace, lace curtains and nets	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Artificial flowers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nets, other than wire nets	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tents	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sacks	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Furniture and upholstery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fur pulling	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Feather sorting	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Umbrellas, &c.	..	..	..	..	..	..	8	..	..	..	..	8	..	..	..	..	..	..
Carding, &c., of buttons, &c.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paper bags and boxes	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Basket making	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brush making	2	..	2	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..
Racquet and tennis balls	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stuffed toys	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
File making	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Electro plate	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cables and chains	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cart gear	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Locks, latches and keys	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Anchors and grapnels	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pea picking	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	56	48	158	7	5	55	397	131	..	..	..	487	10	8	..	..	..	..

D.—Registered Workshops.

Workshops on the Register (s. 131) at the end of the year. (1)	Number. (2)
Tenement Workshops	5
Domestic Workshops	204
Laundries	28
Workshop Bakehouses	267
Other Workshops	575
Total number of Workshops on Register	1,079

E.—Other Matters.

Class. (1)		Number. (2)
Matters notified to H.M. Inspector of Factories— Failure to affix abstract of the Factory and Workshop Act (s. 133)		17
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5).	Notified by H.M. Inspector	15
	Reports (of action taken) sent to H.M. Inspector	17
Other		5
Underground Bakehouses (s. 101)— Certificates granted during the year		..
In use at the end of the year		7

F.—ADDITIONAL SANITATION FOR RETAIL BAKEHOUSES, SECTIONS 97—102.

Number of such premises in the district, 267.

ote to their sanitary condition. Ground floor bakehouses—Good.
Underground— ,, —Satisfactory.

Action taken as to retail bakehouses in 1915, 35.

Action taken.	No. of Defects found.	Notices served.	Legal Proceedings.	Defects remedied.	Remarks.
As to Closets, &c., Sec. 97	1	1	..	1	
As to Water Cisterns, Sec. 97	..	..	..	..	
As to Drain Openings, Sec. 97	1	..	..	1	
As to Limewashing, &c., Sec. 97 ..	33	..	..	30	
As to Sleeping Places, Sec. 100 ...	..	..	..	..	

Any proceedings under Section 98 as to retail bakehouses sanitarily unfit, Nil.

UNDERGROUND BAKEHOUSES.

Number of such premises in district, 7 certified, and 1 not in use at present.

Number certified by District Council under Section 101 (2) in 1915, Nil.

BAKEHOUSES, 1915.

Registered	267
Added to Register........................	17
Discontinued	38
Number of Underground Bakehouses Certified by Authority	7 and 1 not in use at present
Total Number of Ovens	329
Employees—Males	214
Females	312
Notices Served	..

Milkshops.

There were 659 milkshops on the register at the end of 1915. 58 were discontinued during the year, and 100 newly registered. 884 visits were made during the year. Six cases of scarlet fever and two of diphtheria occurred in milkshops during 1915. Seven of these patients were removed to the Sanatorium, the remaining one being isolated in the top room of the house, and precautions taken in all the cases to prevent the spread of the disease.

Shops Act, 1912.

The shops in the Borough are classified under 53 headings. The card index shows a total of 5,196 shops, as compared with 5,209 last year.

31 businesses have been newly registered during the year, and 44 have been discontinued. 17 businesses have changed proprietors during the year.

The number of visits made was 1,235 in the daytime and 85 at night.

In 49 cases of infringement, letters of warning were sent to the occupiers.

Two other cases were referred to the Health Committee. One of the occupiers was warned, and the other was summoned by the Health Committee and fined 15s.

Application for a Closing Order was received from the Boot and Shoe Retailers' Association.

A vote was taken, resulting in a majority in favour of the Order, and the Health Committee recommended the Council to make a Closing Order.

Fertilisers and Feeding Stuffs Act, 1906.

Mr. G. D. Elsdon, the Public Analyst, was appointed Agricultural Analyst for the Borough under Section 2 of this Act.

Pharmacy Act, 1868.

No licenses have been granted in the Borough.

Smoke Nuisance.

Particulars as to smoke nuisances caused by firms during the year 1915, and dealt with by the Health Committee :—

14 notices were issued under the Public Health Act.

1 person and a firm were summoned by the Health Committee in respect of smoke nuisances during the year 1915. The firm was fined £1 10s. and the cases against the person were dismissed.

Owing to the war several firms engaged on Government work were being pressed for quick delivery of the goods ordered and consequently the boilers in many cases were being worked at their utmost capacity. Even then this was insufficient to produce the steam required which caused the emission of more smoke than when working under normal conditions.

They also have a great difficulty in obtaining firemen, and in a number of cases had to rely on labourers to do the work.

During the year 1915 3,189 smoke observations have been made, as against 3,415 in the year 1914, and 4,064 in the year 1913. Three hundred and forty-four stokers and others were cautioned by the Inspector for negligence in firing the furnaces under their charge; at the same time 124 firms were reported to, and dealt with by, the Health Committee; also 344 cautionary notices were issued to firms, with a table of smoke observations taken from their chimneys.

There was one case of a smoke nuisance in connection with a steam motor lurry. A summons was issued but the case was dismissed on payment of costs.

Several chimneys have been raised during the year in connection with small workshops.

TABLE SHOWING THE NUMBER OF HALF-HOURLY OBSERVATIONS TAKEN DURING THE YEAR 1915.

Minutes of Black Smoke emitted in half-an-hour.	No. of Observations taken.	Percentage to Total.
No Black Smoke	1,582	49·6
One Minute	972	30·5
Two Minutes	232	7·3
Three Minutes	279	8·7
Over Three Minutes	124	3·9
Total Observations taken ...	3,189	100·0

Manure Receptacles, and Removal of Manure and other Offensive Matter.

The Bye-laws with respect to receptacles for manure and the weekly removal of manure, filth, or other offensive or noxious matter, which came into operation towards the end of 1909, have been enforced during the past year, and special attention has been paid to stable yards where manure quickly accumulates and where no receptacle is provided.

During the year 5 manure receptacles have been provided.

The Bye-laws as regards the regular removal of manure have been well observed, but it was found necessary to prosecute six occupiers of stable yards for failing to remove manure after written notice from the Corporation.

Five of them were fined in the aggregate £4 5s. 0d., the remaining case being dismissed.

Offensive Trades.

An application was made for permission to establish the trade of gut scraping at certain premises, and after certain alterations had been carried out the request was granted.

Offensive Trades.—The following is a list of the offensive trades in the Borough :—

Nature of Trades.	Borough.	Discontinued.	Newly Registered.
Tripe Dressing	5	..	..
Soap Works	5	..	1
Oil and Tallow	2	..	..
Tanneries	1	..	..
Varnish and Tar	..	..	..
Skin Mat Makers	3	..	..
Gut Scrapers	2	1	1
Total	18	1	2

An application was also made for permission to establish the trade of soap boiling at certain premises, and this request was also granted.

An application for permission to establish the business of a Tripery was also made, but the request in this case was not granted.

Canal Boats Acts.—

Number of canal boats inspected	329
Number of canal boats conforming to Acts	305
Number of canal boats with one or more infringements	24
Total number of infringements	29
Registration	..
Notification of change of master	..
Absence of certificates	3
Marking	3
Overcrowding	..
Separation of the sexes	..
Cleanliness	4
Ventilation	..
Ventilators obstructed	1
Painting	5
Provision of water vessel	2
Water vessels broken	..
Removal of bilge water	..
Boats defective and leaking	9
Stove pipes defective	..
Dilapidation	2
Pump defective	..
Admittance of Inspector	..
Notification of infectious disease	..
Certificates not identifying owners	..
Loading manure without tight bulkheads	..
Number of notices served	11

Other steps taken to secure compliance: 10 letters were written to the owners, and 11 calls were made on owners.

Detention of boats for cleansing and disinfection—none.

Legal proceedings taken: None.

Number of boats on register. Not a Registration Authority.

Canal boats registered to carry	1,350
Men found on the boats	497
Women found on the boats	146
Children under 12 years found on the boats	149

Drainage Inspection.

The testing and examination of all existing drainage is carried out by this Department. Two Inspectors and four labourers are kept continually at work examining drainage, and the following table gives the detailed results of their labours:—

Number of tests made	657
,, applications from householders	23
,, houses affected by the tests	1,664
,, notices and reports issued	358
,, notices and reports complied with	353
,, drain inlets opened and cleared	1,787

Insanitary Conditions Found.

Defects.

Number of	drains wholly and partly choked	1,192
,,	drains defectively constructed	492
	gully traps badly laid	84
,	drains defectively trapped	63
,,	waste pipes defectively trapped or connected to drains	25
,,	downspouts connected to drains	43
,,	soil pipes with leaking joints or defectively ventilated	22
,,	defective water closets	125
	Total defects	2,046

Reconstruction of Drains and the Construction of New Drains.

Number of	tests applied	1,091
,,	houses affected	915
,,	passage drains (tests)	1

Mode Wheel Ambulance and Disinfecting Station.

Staff.—The work of this department is supervised by an Inspector, who devotes part of his time only to this work. Under his control there are five drivers, one of whom is resident at the station, five disinfectors, one of whom attends to the steam disinfecting machines, and two labourers who clean the public conveniences in the Borough. There is one horse, three horse ambulances, three motor ambulances, one horse bedding van, and one motor bedding van. The disinfecting machines are two large Goddard, Massey and Warner's high pressure stoves.

The following are the details of the work carried out during the year :—

SALFORD CASES.—1,185 journeys were made by the ambulances ; 682 journeys were made for the removal of infected bedding and clothing. 1,756 houses were disinfected, involving the disinfection of 3,826 rooms. 3,926 bundles of clothing were disinfected by steam at the station.

OUT-DISTRICT CASES.—377 journeys were made by the ambulances ; 30 journeys were made for the removal of infected bedding and clothing ; 567 bundles of clothing have been disinfected by steam at the Station. Eight journeys were also made for the removal of cases coming under the jurisdiction of the Port Sanitary Authority ; disinfection has been carried out on ten ships stationed at the Manchester Ship Canal, and 22 bundles of clothing and bedding have been disinfected. 956 journeys were made for the removal of convalescent cases from the Ladywell Sanatorium to their homes.

SALFORD CASES AND OUT-DISTRICT CASES.—2,645 journeys were made during the year, delivering disinfected bedding and clothing.

78 bundles of clothing and bedding were destroyed at the owners' request.

Disinfection has been carried out at 12 schools, and also at 21 public institutions in the Borough during the year. 171 books from public and private libraries have been disinfected.

2382 kits and bundles of bedding from the Military Hospitals in the Borough were disinfected.

15 midwives were bathed at the station, and their clothing and various instruments disinfected. 25 "Contacts" were also bathed.

110 children in a verminous state were bathed and their clothing disinfected. Three persons in a verminous state were bathed.

The ambulances belonging to the Salford Union were disinfected on 19 occasions.

Sanitary Conveniences.

There are 21 conveniences in the Borough, under the control of the Health Committee, situated :—

Trinity Market, Salford.
Liverpool Street, Salford.
Broughton Lane, Broughton.
Bolton Road (junction of Claremont Road), Pendleton.
Whit Lane, Pendleton.
Windsor Bridge, Salford.
Blucher Street, Salford.
Stevenson Street, Salford.
The Cliff, Broughton.
Park Lane, Broughton.
Broad Street, Pendleton.
Greengate Arch, Salford.
Eccles New Road, Weaste.
Broughton Bridge.
Frederick Road, Pendleton.
Cross Lane, Salford.
Trafford Road (Eccles New Road corner).
,, ,, (near the Docks).
Oldfield Road (corner of Chapel Street).
Moor Lane, Broughton.
Royal Archer, Lower Broughton Road.

These conveniences have been kept in a clean condition. Water closet and washing accommodation is provided at three of these conveniences, and at one convenience sanitary accommodation is also provided for women.

TABLE G 1.

Common Lodging-Houses, 1915.

Wards.	Crescent.	Islington.	Ordsall.	St. Matthias'	St. Paul's.	St. Thomas's.	Trinity.	Total.
Number on Register	5	11	1	1	1	3	3	**25**
Number added to Register in 1915	..	..	..	..	..	..	..	..
Number Re-registered under Part 5 Public Health Acts Amendment Act, 1907	3	4	..	..	..	2	1	**10**
Number removed from Register in 1915	1	..	..	..	..	..	..	**1**
Number of Rooms	48	61	7	7	7	20	34	**184**
,, ,, Beds	231	540	40	34	32	92	212	**1,181**
Average Number occupied each night—Males	151	433	36	23	20	51	144	**858**
Females	..	..	..	..	..	..	..	..
Notices served on Landlords	..	4	..	3.	..	..	..	**7**
,, ,, Keepers	1	..	..	..	..	..	2	**3**
Number of Day Inspections	213	418	43	48	39	122	131	**1,014**
,, Night ,,	10	8	4	2	..	..	..	**24**

TABLE G 2.

SAMPLES COLLECTED BY THE INSPECTOR, UNDER THE "SALE OF FOOD AND DRUGS ACT," FROM 1875 TO 1915.

	Total.	Milk.	Butter.	Bread and Flour.	Drugs.	Groceries.	Beer and Porter.	Wines and Spirits.	Sundries.
1875..	60	37	1	1	1	..	7	4	9
1876..	119	43	2	18	34	17	..	..	5
1877..	390	114	7	159	22	30	18	37	3
1878..	418	197	10	35	31	25	24	70	26
1879..	518	306	16	130	15	28	10	13	..
1880..	506	269	12	48	5	52	71	18	31
1881..	478	376	11	1	..	61	..	8	21
1882..	465	300	7	47	13	3	58	20	17
1883..	497	436	1	29	1	12	..	2	16
1884..	507	359	10	35	7	..	64	11	21
1885..	478	399	21	14	4	13	21	..	6
1886..	483	361	6	21	..	36	1	22	36
1887..	472	355	2	..	..	25	42	43	5
1888..	883	701	6	..	30	83	..	9	54
1889..	832	652	35	..	21	85	15	17	7
1890..	874	591	41	38	24	64	12	49	55
1891..	901	611	20	20	18	134	23	74	1
1892..	853	613	78	31	13	61	7	44	6
1893..	955	855	15	1	..	51	6	27	..
1894..	765	676	50	1	..	35	..	3	..
1895..	767	633	58	7	1	25	..	12	31
1896..	730	419	247	5	..	21	13	20	5
1897..	791	460	236	32	..	24	..	39	..
1898..	771	365	332	16	7	25	..	14	12
1899..	763	338	389	..	5	11	..	..	20
1900..	752	297	327	14	..	33	48	9	24
1901..	760	312	388	10	..	11	26	..	13
1902..	785	296	440	5	..	31	..	..	13
1903..	825	312	355	12	..	70	13	15	48
1904..	826	284	285	6	2	216	1	22	10
1905..	801	325	245	7	..	193	..	16	15
1906..	894	369	237	9	4	237	..	5	33
1907..	890	435	250	5	..	187	..	..	13
1908..	899	417	234	9	8	205	12	..	14
1909..	898	401	263	7	..	209	..	..	18
1910..	956	397	284	10	..	250	..	..	15
1911..	903	378	257	13	..	228	..	..	27
1912..	954	413	273	7	..	238	..	..	23
1913..	944	355	272	12	19	243	..	..	43
1914..	949	351	255	25	39	254	..	..	25
1915..	1774	435	229	65	54	374	..	..	17

TABLE G 2.—*continued.*

PERCENTAGE OF ARTICLES RETURNED AS ADULTERATED.

	Total	Milk.	Butter.	Bread and Flour.	Drugs.	Groceries.	Beer and Porter.	Wines and Spirits.	Sundries.
1875..	66·6	62·1	100·0	..	..	..	100·0	75·0	66·6
1876..	40·3	55·8	50·0	27·8	35·3	17·6	..	..	60·0
1877..	27·4	40·3	28·6	11·3	13·6	6·7	..	97·3	..
1878..	29·9	29·4	10·0	2·9	51·6	4·0	4·2	67·1	..
1879..	12·0	13·1	25·0	5·4	26·6	10·7	10·0	2·3	..
1880..	20·2	25·2	75·0	6·3	..	17·3	11·3	11·1	9·7
1881..	16·3	18·1	9·1	..	..	1·6	..	37·5	23·8
1882..	15·5	19·0	14·3	2·1	53·8	..	1·7	10·0	17·6
1883..	6·6	6·7	..	3·4	..	8·3	..	50·0	6·3
1884..	7·1	2·8	40·0	5·7	57·1	..	..	27·3	61·9
1885..	5·2	4·8	4·8	7·1	..	15·4	..	..	33·2
1886..	3·9	1·1	50·0	..	..	25·0	..	..	8·3
1887..	8·7	9·9	..	..	..	8·0	2·4	7·0	..
1888..	6·3	2·8	100·0	..	26·6	13·3	..	..	20·4
1889..	10·1	7·3	22·8	..	28·5	24·7	..	..	14·2
1890..	5·1	1·9	50·0	..	..	15·6	..	30·6	12·7
1891..	6·1	1·4	35·0	10·0	..	22·3	..	9·4	..
1892..	7·4	4·2	29·5	..	23·1	18·0	..	..	..
1893..	6·6	4·0	26·7	..	..	17·6	..	59·3	..
1894..	1·2	1·1	2·0	..	..	..	..	..	..
1895..	2·3	1·2	15·5	..	..	8·0	..	..	..
1896..	4·1	2·4	6·5	..	..	..	..	20·0	..
1897..	4·3	4·3	4·2	..	..	..	..	7·7	..
1898..	1·9	1·6	1·8	..	2·9	..	..	7·1	..
1899..	3·9	2·4	4·4	..	100·0	..	..	..	..
1900..	3·7	3·4	0·9	..	..	..	25·0	33·3	4·2
1901..	1·7	2·9	1·0	..	..	..	..	..	..
1902..	1·1	1·7	0·9	..	..	..	..	..	..
1903..	0·6	1·3	..	..	..	..	..	..	2·0
1904..	3·6	3·5	2·1	..	..	0·9	..	54·5	..
1905..	1·9	2·5	1·6	..	..	..	..	12·5	6·6
1906..	1·7	3·5	..	..	..	0·8	..	..	..
1907..	0·5	0·7	0·4	..	..	..	..	..	..
1908..	0·9	1·7	0·4	..	..	..	..	..	..
1909..	0·6	1·2	..	..	..	..	..	..	..
1910..	2·2	4·8	0·3	..	..	0·4	..	..	..
1911..	2·5	4·8	1·6	..	..	0·4	..	..	..
1912..	1·8	3·6	..	..	..	0·8	..	..	..
1913..	1·6	3·4	0·7	..	..	..	..	..	2·3
1914..	2·4	3·1	..	..	28·2	0·4	..	..	..
1915..	2·8	4·8	3·5	..	3·7	0·5	..	..	..

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TABLE G 3.

New Houses Erected and Houses Demolished in 1915.

Wards.	Houses erected.	Houses demolished.
Kersal	19	—
Albert Park	—	—
Grosvenor	1	—
St. Matthias'	—	14
Trinity	—	1
Crescent	—	2
Islington	—	11
Regent	—	—
Ordsall	—	1
Trafford	—	—
Charlestown	81	3
St. Thomas'	—	—
St. Paul's	—	—
Seedley	—	—
Weaste	—	—
Hope	22	—
	123	32

TABLE G 4.

WATER CLOSETS PROVIDED IN 1915 IN LIEU OF PRIVY MIDDENS AND PAIL CLOSETS, AND ALSO ADDITIONAL WATER CLOSETS PROVIDED IN THE RE-MODELLING OF INSANITARY DWELLINGS.

Wards.	
Kersal	4
Albert Park	—
Grosvenor	2
St. Matthias'	15
Trinity	6
Crescent	16
Islington	10
Regent	12
Ordsall	13
Trafford	—
Charlestown	16
St. Thomas'	43
St. Paul's	38
Seedley	6
Weaste	40
Hope	26
	247

TABLE G 6.

Cases heard before Magistrates, 1915.

Particulars of Offence.	No. of Cases.	Decision of Justices.	Total Fines without Costs.		
			£	s.	d.
For selling milk which was not of the nature, substance, and quality demanded.	5	3 fined without costs .. 1 fined with costs ..... 1 withdrawn..........	3	5	0
For consigning milk to a Salford dealer which was not of the nature, substance, and quality demanded.	1	Fined without costs ...	0	10	0
For selling butter which was found on analysis to be margarine.	1	Fined without costs ...	3	0	0
For depositing for the purpose of sale a piece of beef which was diseased.	2	Fined with costs	6	0	0
For exposing a horse on the public highway suffering from Parasitic Mange.	1	Fined without costs ...	0	19	6
For not closing shop on weekly half-holiday as required by Shops Act, 1912.	1	Fined without costs ...	0	15	0
For failing to comply with the requirements of Notices under the Public Health Act, 1875, to abate nuisances arising from certain sanitary defects.	1	Fined without costs and order to abate obtained.	2	0	
Keeper permitting the overcrowding of a room of a sub-let house.	1	Fined without costs ...	0	10	
Occupier overcrowding room of a sub-let house.	1	Fined without costs ...	0	10	
Carried forward	14		17	9	

CASES HEARD BEFORE MAGISTRATES, 1915.—Continued.

Particulars of Offence.	No. of Cases.	Decision of Justices.	Total Fines without Costs.
			£ s. d.
Brought forward..........	14		17 9 6
cupier allowing room of a sub-let house to be in a dirty condition.	1	Fined 5s. on both summonses, to be remitted when work done.	—
cupier allowing bedding in bedroom of a sub-let house to be in a dirty condition.	1		
r failing to comply with Notice under the Bye-laws with respect to streets and buildings and Sanitary Requirements made by the Corporation.	3	3 fined without costs ..	2 5 0
r allowing structural defects to exist in connection with the chimney of works.	4	4 dismissed	—
r non-compliance with Order to abate nuisance arising from the emission of black smoke from the chimneys of works.	3	Fined without costs ...	1 10 0
r allowing dense black smoke to be emitted in connection with a steam motor lurry.	1	Dismissed on payment of costs	—
r failing to remove certain manure from stable premises after written notice from the Corporation.	6	——	4 5 0
TOTAL	33		£25 9 6

TABLE G 6.

YEAR 1915.

METEOROLOGY, AND REGISTERED DEATHS FROM ALL CAUSES, AND FROM CERTAIN PREVALENT DISEASES, IN EACH FORTNIGHT OF THE YEAR.

Fortnight ending.	Temperature of the Air.			Temperature—4-feet below ground.	Mean Humidity. Complete Saturation = 100.	Rainfall in Inches.	Deaths Registered from				
	Highest during the Fortnight.	Lowest during the Fortnight.	Mean Temperature.				All Causes.	Seven Zymotic Diseases.	Diarrhœa.	Lung Diseases.	Phthisis.
	°	°	°	°							
1915.											
Jan. 16....	54·4	32·0	42·1	43·2	88	4·055	134	11	..	33	8
30....	49·7	29·0	38·0	42·0	83	·594	158	11	2	44	14
Feb. 13....	53·1	30·8	40·9	41·5	88	1·407	167	15	2	39	13
27....	50·9	28·0	38·2	41·2	88	1·178	205	28	3	51	29
Mar. 13....	54·9	33·0	42·6	41·2	87	1·030	189	36	5	56	14
27....	62·6	28·0	40·9	42·0	86	·509	227	41	5	57	18
April 10....	56·4	26·8	41·2	42·1	80	·915	216	33	..	74	22
24....	56·1	30·5	44·6	44·5	79	·371	199	38	..	47	16
May 8....	72·1	39·5	51·0	46·4	69	·445	180	33	..	45	12
22....	73·1	33·7	48·9	49·2	70	·872	155	26	..	39	12
June 5....	77·4	36·8	54·7	52·8	68	·414	159	17	2	48	13
19....	76·2	42·8	58·2	55·2	66	..	139	15	6	29	21
July 3....	74·2	46·5	57·4	56·9	76	4·120	123	16	4	30	11
17....	73·9	49·0	56·3	57·0	82	2·668	108	5	6	27	10
31....	71·1	49·0	57·8	56·8	78	1·618	83	3	3	14	8
Aug. 14....	74·1	47·8	60·2	57·7	79	2·807	108	7	8	13	11
28....	71·6	49·5	58·5	58·1	77	·789	121	5	13	18	6
Sept. 11....	76·9	39·5	55·4	57·2	72	1·173	141	3	22	27	14
25....	75·1	49·5	60·1	57·8	74	·363	142	5	34	16	11
Oct. 9....	61·9	33·4	48·3	55·7	80	·088	134	3	32	21	[illegible]
23....	64·7	39·5	50·7	53·9	86	·630	140	4	23	17	[illegible]
Nov. 6....	55·0	29·7	41·8	50·7	83	·718	112	7	11	20	[illegible]
20....	54·9	24·2	38·7	46·8	83	1·382	149	12	7	32	1
Dec. 4....	45·8	23·5	35.5	42·6	84	1·584	212	7	7	80	2
18....	54·1	27·0	41.3	42·0	87	2·045	144	4	4	34	1
1916.											
Jan. 1....	55·7	28·5	44·2	42·1	88	2·095	132	2	1	27	1

TABLE G 7.

METEOROLOGY.

Temperatures in Quarters and Years.

Temperature in Shade.

Mean Maximum.

	1913.	1914.	1915
	°	°	°
st Quarter ..	51·8	53·4	51·3
nd ,, ..	65·7	70·4	69·0
rd ,, ..	73·8	74·4	70·5
th ,, ..	59·0	55 2	52·6
Year	**62·5**	**63·4**	**52·6**

Mean Minimum.

	1913.	1914.	1915
	°	°	°
1st Quarter ..	31·2	33·5	30·7
2nd ,, ..	40·2	41·1	40·2
3rd ,, ..	46·7	47·5	46·9
4th ,, ..	35·6	36·2	31·3
Year ..	**38·4**	**39·6**	**37·3**

Mean Temperature.

	1913.	1914.	1915
	°	°	°
st Quarter ..	41·1	42·7	40·3
nd ,, ..	51·1	52·6	51·8
rd ,, ..	57·7	58·6	57·2
th ,, ..	47·2	45·3	42·7
Year ..	**49·2**	**49·8**	**48·0**

Mean Temperature— 4 feet below ground.

	1913.	1914.	1915
	°	°	°
1st Quarter ..	41·9	43·1	41·9
2nd ,, ..	48·0	50·9	50·2
3rd ,, ..	56·4	58·7	57·4
4th ,, ..	50·2	49·7	47·0
Year ..	**49·1**	**50·6**	**49·1**

Mean Humidity.

	1913.	1914.	1915
st Quarter ..	88	86	87
nd ,, ..	77	74	72
rd ,, ..	77	77	77
th ,, ..	85	85	85
Year ..	**82**	**81**	**80**

Amount of Rainfall.

	1913.	1914.	1915
1st Quarter ..	5·10	7·55	9·28
2nd ,, ..	7·44	5·73	6·63
3rd ,, ..	5·29	9·20	9.51
4th ,, ..	6·87	10·82	8·45
Year ..	**24·70**	**33·30**	**33·87**

TABLE G 8.

REGISTER OF WORK DONE—YEAR ENDING JANUARY 1ST, 1916.

No of Complaints received		3427
Inspections of	Dwelling-houses	19467
	Schools	561
	Factories	43
	Canal Boats	329
	Common Lodging-houses (Day)	1014
	,, ,, ,, (Night)	24
	Sub-let ,, ,, (Day)	529
	,, ,, ,, (Night)	12
	Seamen's Lodging-houses (Day)	335
	,, ,, ,, (Night)	50
	Slaughter-houses	1041
	Dairies and Milk-shops	884
	Shippons	77
	Piggeries	72
	Van Dwellings	16
	Tips	46
	Bakehouses (Day)	383
	,, (Night)	..
	Workshops (Day)	978
	,, (Night)	38
	Domestic Workshops	133
	Domestic Workshops (Night)	..
	Restaurant Kitchens	34
	Premises where food is prepared	218
	Fish and Fruit Stalls and Shops	48
	Poulterers' Shops	23
	Butchers' Shops and Stalls	379
	Greengrocers' Shops	88
	Grocers' Shops	87
	Outworkers' Premises	487
	Ice Cream Shops and Stalls	14
	Re Offensive Trades	87
	Re Shops Act	1235
	Re Shops Act (Night)	85
	Re Midwives	361
	Re Still Births	150
	Re Infantile Deaths	163
	Re Verminous Houses	..
	,, ,, Children	..
	Miscellaneous	2308
	Re Smallpox contacts	102
	Re Cerebro Spiral Meningitis contacts	64
	Laundries	60
	Urinals —Public	152
	—Private	151
	Re Infectious Disease	3657
	Re Ophthalmia Neonatorum	95
	Re Cases of Phthisis	7710
Re-inspections		14041
Action taken	Notices issued	1888
	,, uncomplied with	106
	Letters written	10003
	Summonses issued	33
Disinfection—Houses Disinfected		1760
House Drains	Repaired	137
	Reconstructed	950
	Trapped	275
	Slopstone Pipes disconnected from	1
	Downspouts disconnected from	12

REGISTER OF WORK DONE—(*Continued*).

Water Closets	New, provided	**247**
	Ventilated	..
	Soil-pipes ventilated	..
	Urinals provided	..
Ash receptacles	New, provided	**256**
Limewashed	Dwelling-houses	**3**
	Cellars	..
	Lodging-houses	**9**
	,, Sub-let	**7**
	,, Seamen's	**14**
	Bakehouses	**207**
	Slaughter-houses	..
	Dairies and Milkshops	**1**
	Workshops	**29**
Limewashed	Workshops (Domestic)	**13**
	Outworker's premises	**72**
	Laundries	**19**
	Restaurant kitchens	..
	Shippons	..
	Urinals	**6**
	Offensive Trade Premises	..
Closure of	Houses unfit for habitation	**3**
Newly registered	Lodging-houses	..
	,, ,, Sub-let	**34**
	Slaughter-houses	..
	Workshops	**37**
	,, (Domestic)	**20**
	Dairies and Milkshops	**100**
	Bakehouses	**17**
	Laundries	**2**
	Shops under Shops Act	**31**
	Second-hand Goods Stores	**29**
	Offensive Trades	**2**
Accumulations Removed	Manure and Refuse	**45**
	Stagnant Water	**7**
	Manure receptacles provided	**5**
Smoke Nuisance	Observations taken	**3189**
	Notices served	**14**
	Cautionary Notices served	**347**
Passages and Yards	Flagged	..
	Repaired	**419**
	Drained	..
Infected Bedding and Clothing	Stoved	**3905**
	Destroyed	**78**
Food	Samples purchased for analysis	**1221**
Milk	Samples obtained for bacteriological examination	**190**
Unsound Food	Seizures made	**891**
Animals removed from improper situations		**11**
Overcrowding of dwellings abated		**34**
Houses repaired, by owners, after notice		**1677**
,, cleaned		**91**
Canal Boats painted		**12**
,, defective		**10**
,, repaired		**15**